Roving Missile Trains?—p. 36

July 6, 1959

RAILWAY AGE weekly



Railroads are going "Roller Freight" at a faster rate than ever before. And more railroads and other car owners are making the switch. In the first quarter of 1959 alone,

they ordered more Timken bearing-equipped cars than were ordered during the entire year of 1957, the previous "best" year—reports The Timken Roller Bearing Co., Canton 6, Ohio.

BETTER-NESS rolls on

For the complete story, see pages 16-17

tapered roller bearings



Edgewater Rolled Ste



101 Freight Cars







Edgewater Steel Company

PITTSBURGH 30, PA.

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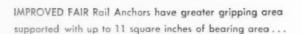
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Week at a Glance

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'Bad faith' in rules fight? p. 9

Grand Chief Engineer Guy L. Brown says the railroads, by conducting what he calls a "smear campaign" against their employees, have hurt chances for consideration of work-rules changes. Meanwhile, there are indications that the industry even without labor's concurrence, may ask the White House to set up an investigating commission.

NYC maps \$70-million programp.12

The New York Central is seeking government guaranty of a \$40-million loan to help pay for a \$70-million capital improvement program.

Rutland gears service to salesp.18

The road is making a name for itself for special service between New England and connections to the West. Its techniques are not unusual, but some of its operating characteristics are.

Machine cuts track labor needp.21

The new Mannix tie ejector-liner quickly removes old ties and lines the track behind an undertrack plow. It is said to reduce labor requirements for the job by as much as 18 to 25 men.

UP to get new lounge-dinersp.28

The cars, being built by St. Louis Car Company, will combine various features of the road's present dining, lounge and lunch counter cars.

Cover Story-Defense plan: Missile-firing from RRsp.36

Bethlehem Steel has teamed up with a missile-engineering firm to design a missile-launching train. A prototype could be on the rails by 1962 if the Pentagon approves the plan.

REA board OK's survival planp.41

Here are details of a sweeping reorganization designed to keep the Agency in business under railroad ownership.

The Action Pagep.50

Here's a letter no union leader has written—not yet anyway. But management and labor, it points out, both have a stake in getting business back to the rails. So why not spell out how working rules changes could lead to an effective business-getting program? It might prevent a big public fight that would benefit no one.



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Week at a Glance CONT

Current Statistics

Ope	rating	revenue	9	
4	mos.,	1959	.\$3,24	6.567,038
4	mos.,	1958	2,98	4,176,169
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31	une 1,	1958		30,386
Frei	ght ca	rs delive	ered	
5	mos.,	1959		14,322
5	mos	1958		27,138

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Short and Significant

MoPac's Thrift-T-Sleeper service . . .

on the "Colorado Eagle" posted a 78° occupancy ratio during its first year of operation. The economy sleepers carried 14,290 passengers (averaging 19.6 per day), earned \$69,916 Pullman revenue and \$307,654 rail revenue at coach fare levels.

Director for transport study . . .

has been selected by the Senate Committee on Interstate and Foreign Commerce. He's Maj. Gen. John Doyle, retired, former director of transportation for the Air Force. The study, originally authorized a year ago and kept alive this year by Senate Resolution 29, will be concerned with problems left untouched by the 1958 Transportation Act, including such issues as user charges on publicly-owned transport facilities, and the railroads' call for more freedom to operate other modes of transport.

Automobile TOFC service . . .

is heading into new territory: the Southeast. Joint rates from St. Louis to points in Alabama, Georgia and Mississippi have been proposed by the Frisco and Commercial Carriers, Detroit trucking firm. Frisco previously opened up the Southwest to new-car piggyback with rail-highway service from St. Louis to Texas and Oklahoma points.

Hope for 'a more suitable method' . . .

of financing the acquisition of freight cars was mentioned again last week by Great Northern President John M. Budd. He told the Libby (Mont.) Chamber of Commerce that GN and others are working to develop a plan which will add to the nationwide ownership. Railroad and equipment supply circles still are discussing the "Railroad Freight Car Co." plan of acquisition which cropped up last April (RA, Apr. 13, p. 10). Some 10 roads originally were interested.

Free unionism will be a basic policy . . .

in a new membership drive planned by the United Railroad Operating Crafts. Aim of the organization, UROC officers say, is the integration of all crafts. Both operating and non-operating employees are eligible for membership. UROC was founded eight years ago, has had a stormy existence since then. National-in-scope recognition and the railroad union shop have been major stumbling blocks. But, President J. P. Carberry declares, UROC is embarking on an overall membership campaign and "let the chips fall where they may."



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BROWNHOIST

'Bad Faith' in Rules Fight?

► The Story at a Glance: Guy L. Brown told rail management last week that a "smear campaign" against workers has dimmed prospects for peaceful consideration of work rules changes.

He said the railroads apparently intend to "force" a strike on the featherbedding issue-but warned that the blame for any tie-up would lie with management, not the unions.

Meanwhile, the AAR bought space in 138 major newspapers to assure the public of its determination to win 'some correction in . . . outmoded work rules" despite the operating brotherhoods' "callous disregard" of the public interest.

Probable next step: management appeal to the White House for a special investigating commission.

Grand Chief Guy L. Brown of the Brotherhood of Locomotive Engineers has denied AAR charges that the unions have resorted to "mud-slinging" on the featherhedding issue.

In a statement to Railway Age, Mr. Brown replied to a Minneapolis speech by AAR President Daniel P. Loomis in which Mr. Loomis said that management's call for "labor statesmanship" had been answered by "high-pitched hysteria, mud-slinging and name-calling" (RA, May 25, p. 9).

"I have stated many times in the past several years," said Mr. Brown, that government, labor and management have all failed to look squarely at the railroad industry's problems and make necessary changes in the regulatory laws and labor agreements. many of which date back to the turn of the century.

'A good time for everyone to have taken a careful look would have been immediately subsequent to signing the last agreement. However, management wasn't interested until the date for the expiration of the moratorium was upon

"Now the smear campaign being conducted by rail management practically guarantees that no one will be able to look calmly at these problems for some time to come."

The brotherhood leader said that "if strikes and a transportation tie-up' occur, as Mr. Loomis predicts, the responsibility will rest with railroad man-

agement, not with the employees and their brotherhoods." He added:

"It appears that the people Mr. Loomis represents intend to force a tieup despite the damage it would inflict on the nation. That certainly is not a good atmosphere in which to begin honest and sincere negotiations this

"On the subject of 'mud-slinging,' is it not strange that it is 'mud-slinging' when the employees point to a few of management's shortcomings but it is supposed to be a statement of fact when management charges employees with 'featherbedding' because the employees insist that agreements made in good faith be complied with until changed in accordance with procedures set up in the Railway Labor Act?

"The current campaign to pin the 'featherbedding' label on railroad employees is as vicious as it is deceitful. When the railroads of this country employ a public relations firm to do a special smear job on loyal employees, instead of bargaining in good faith, we have reached an all-time low in labor-management relations."

[An AAR spokesman said last week that there has been "no secret" about the association's employing the San Francisco firm of Whitaker & Baxter as counsel for its public relations program.

of which the drive against featherbedding is an important part. It was also stated that General Public Relations, an affiliate of the AAR's advertising agency, Benton & Bowles, has been employed to assist in the handling of the association's press relations at New Yorkl.

Mr. Brown then asked:

"Are employees expected to humbly accept the charges (with no explanation) that they are paid for work not done? Are we supposed to willingly agree that we have been taking money under false pretenses? How do they explain that management agreedvoluntarily in most cases—to the rules which provide for the payments now under attack? Are we expected to smile when being tarred and feathered?

"When we offer criticism of management practices which we believe are detrimental to the welfare of the industry, we are accused of 'mud-slinging'. We will not sit idly by and be made the scapegoats for troubles of the industry which are not our fault.'

On management's side, the AAR last week sponsored newspaper advertisements throughout the country explaining what the featherbedding fight's about-and why the railroads feel they have to wage it. The ads appeared June

Continued on page 47

'We have reached an all-time low in labormanagement relations . . . Are we expected to smile when being tarred and feathered?'



GUY L. BROWN

Erie, DL&W File Merger Plan

The Erie and the Lackawanna last week formally asked the ICC for permission to become the Erie-Lackawanna Railroad Co.

A merger, the two roads told the Commission in a joint application, would result in increased earnings "of not less than \$13,400,000" a year, before federal income taxes.

Most of the increase would come from operating savings, according to Erie President Harry W. Von Willer and Lackawanna President Perry M. Shoemaker.

They said a net cash investment of not more than \$5,000,000 would be necessary to produce these savings which would be achieved gradually within a period of five years.

Planned capital improvements would include a new electronic yard at East Buffalo. N. Y.. improved signaling, bigger freight yards at Hornell, N. Y., and Jersey City, N. J., construction of connecting tracks and bridges and additional communication lines.

The two presidents said they expect "little or no opposition" to the merger proposal when it comes up for ICC hearing, possibly in September.

They said they hoped to have full approval for the plan and start combining administrative and operating functions early next year.

Major economies, the application stated, would come from greater use of motive power and equipment, consolidation of freight and passenger train facilities, elimination of duplicate facilities, and combination of department activities.

Proxy material will go out to security holders sometime in August. Both roads will hold special stockholder meetings on Sept. 22 to seek approval.

Under the merger plan, Eric common stockholders will receive 114 shares and Lackawanna holders one share of common stock of the new company for each share now held. Eric preferred stock will not be affected and all existing bonds of both companies, including debentures, will remain outstanding as a debt of the merged company.

The presidents said the merger would not increase fixed or contingent charges. Annual fixed charges based on the year 1958 will amount to about \$9,450,000 and contingent charges to \$3,800,000 on a total debt of \$333,700,000, including \$55,000,000 of equipment trust obligations.

A merger would create a 3,200-mile railroad with assets of approximately \$737,000,000. (RA, May 4, p. 34.)

Watching Washington with Walter Taft

• THE PAINT CASE is now before the ICC for decision. It's the test case involving suspended tariffs in which the eastern railroads propose to reduce rates on paint and thus attract traffic now moving by truck. It is the first proposal to come out of the rate-research program of the eastern roads, and their defense of it relies principally on the 1958 Transportation Act's rate-free-dom provision.

THE SUSPENDED TARIFFS were published to become effective last Oct. 1. The Commission's power to suspend ended May 1, but the railroads have continued to hold up the schedules at the Commission's request. Latest of these agreements extends the delay for another 120 days from last Wednesday.

ARGUMENTS OF COUNSEL put the case before the Commission last week. For the eastern roads, the B&O's Jervis Langdon, Jr., argued for a Commission determination that out-of-pocket costs provide the proper basis for measuring the compensatory character of competitive rates. He emphasized that the proposed rates are based on railroad conditions, not on comparisons with truck rates, and that the eastern lines think this pattern follows the mandate of Congress.

HOPE of his clients, as Mr. Langdon puts it, is for a return to rate-making principles which Congress set out in the 1940 Transportation Act and re-emphasized in 1958. They want an interpretation of the rate-making rule as it has been thus shaped up, and they would rather lose the case than have the rates authorized "under

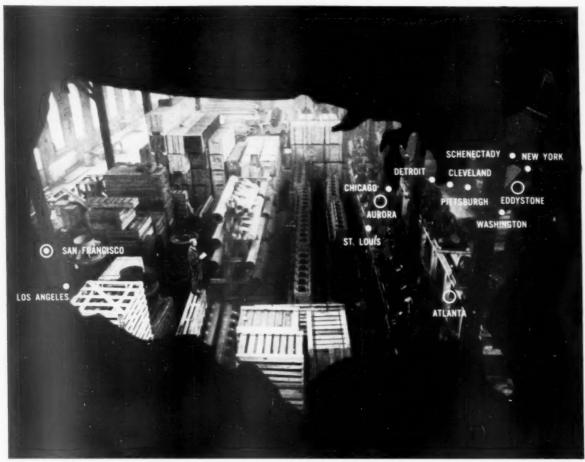
conditions that still leave us up in the air."

SHIPPER SUPPORT at the argument session came from the National Industrial Traffic League, which was an early intervener on the side of the railroads. The league's counsel, Robert N. Burchmore, was on hand to urge approval of the rates in a decision which would make clear a Commission view that the shipping public is entitled to the benefits of carrier competition.

PROTESTING TRUCKERS denied that they are pleading for "umbrella" rate-making. Their counsel, Edgar Watkins, said they could meet the proposed railroad rates. Thus, as he put it, the motor carriers are not afraid of losing the business. But they consider it a destructive competitive practice for one mode of transportation to cut competitive rates where the only result would be loss of revenue by both modes.

• THE 10% TAX ON FARES won't be repealed this year, but it may be cut to 5% next year. That's the compromise embodied in the final version of the tax act of which the Senate version had a repeal provision, effective Aug. 1. The act extends for one year the present corporate income tax rate of 52% and some excise taxes which were scheduled to expire. Its House version had no fare tax provision.

THE FINAL VERSION provides for reducing that tax to 5% on July 1, 1960. That, of course, does not assure the reduction. Congress could change its mind before that time.



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C&O: Old Box Cars Take on a New Look

The Chesapeake & Ohio is converting 125 old box cars into new Compartmentizer insulated refrigerator cars at its Raceland, Ky., shops. The first fifty, shown here on the assembly line, were completely rebuilt from 50-ft box cars

purchased from the Atlantic Coast Line; beginning in September, C&O will do the same to 75 of its oldest 40-ft box cars. Cost of the work, which includes stripping the cars of paint, old floors and side pieces, is approximately \$9,000 per car.

NYC Maps \$70-Million Program

The New York Central last week asked for a federal government guaranty of a \$40,000,000 loan that will help pay for a \$70,000,000 capital improvement program.

In its application to the ICC, the railroad said eight insurance companies had agreed to advance the money. It will be used to pay part of the costs of three new electronic yards and nine CTC projects (RA, June 8, p. 35).

One of the new yards will be in Indianapolis. Exact sites for the other two haven't been determined—but one will be in New York State and the other somewhere in the Midwest.

The CTC projects are scheduled for segments of the NYC's main line between New York and Toledo, Ohio, and between Terre Haute, Ind., and Cleveland, Ohio.

Terms of the loan call for repayment within 15 years and interest of 5%. The road said repayment will be made in 12 approximately equal annual installments beginning in 1963.

The road plans to take \$19,500,000 of the loan in 1959, \$17,000,000 in 1960 and \$3,500,000 in 1961. To secure the loan, NYC will pledge \$57,-

819,000 principal amount of New York Central Railroad Company Refunding and Improvements 5% Mortgage Bonds, due Oct. 1, 2013, and \$28,704,000 principal amount of New York Central Railroad Company 4% Consolidation Mortgage Bonds, due Feb. 1, 1998.

Biggest lender would be Equitable Life Assurance Society, which would lend \$10.000,000. Each of the following would lend \$5,000,000: Aetna Life Insurance Co., John Hancock Mutual Life Insurance Co., Mutual Benefit Life Insurance Co., Phoenix Mutual Life Insurance Co. and Travelers Insurance Co. Mutual Life Insurance Co. of New York would lend \$3,000,000, and Connecticut General Life Insurance Co. \$2,000,000.

NYC is the fourth railroad to seek a loan guaranty under provisions of the 1958 Transportation Act. Boston & Maine last week received final approval for guaranty of a \$3,000,000 loan. The Georgia & Florida has received a \$1,000,000 guaranty. The New Haven is seeking a guaranty for \$10,000,000.

Approval of the B&M loan came after the road accepted ICC-imposed

conditions, including a restriction on the B&M as to payment of dividends and purchase of its own stock or that of any of its subsidiaries.

The loan will be evidenced by notes due June 1, 1974. Proceeds will reimburse the B&M for capital expenditures made from its treasury fund. There will be six lenders, headed by Bankers Trust Co. of New York, which will lend \$1,000,000. The Union Dime Savings Bank of New York, the Providence (R.I.) Institution for Savings, and the Gulf Insurance Co. of Jacksonville, Fla., will lend \$500,000 each. Irving Trust Co. of New York will lend \$300,000, and the First and Merchants National Bank of Richmond, Va., \$200,000.

Carrier Members Rap Sustaining of Claim

The First Division, National Railroad Adjustment Board, has sustained in part an employee claim which the carrier sought to bar by relying on the doctrine of equitable estoppel (RA, June 1, p. 23).

The case involved a Louisville & Nashville fireman's request to be restored to the service with seniority unimpaired and to be paid for time lost since his name was removed from the seniority roster. The First Division with referee sustained the claim with respect to seniority status but dismissed without prejudice the pay-for-time-lost and restoration-to-service requests.

Carrier members of the Division, in a dissent, reviewed the history of the case. The fireman was injured in a yard accident in 1951. Three years later he filed suit for damages (\$85,-000), alleging serious and permanent injury. Judgment was entered in 1955 on a verdict awarding damages in the amount of \$41,500. About a year later, a compromise settlement of \$39,000 was made. The employee's name was removed from the seniority roster. The claim resulted.

In their dissent, carrier members argued against the referee's findings on the seniority issue. They added: "Another phase of this case, which the referee chooses to ignore completely... is the doctrine of equitable estoppel, which demanded a denial of this case and made entirely redundant a specious excursus on seniority."

As for the seniority question, the dissent charged that "quite contrary to the [referee's] holding that 'there is no basis for terminating claimant's seniority,' claimant's proof of permanent loss of ability to work in his craft—further confirmed by his acceptance of compensation for such loss—is ample basis, but there is no sound basis, whatsoever, for this award."

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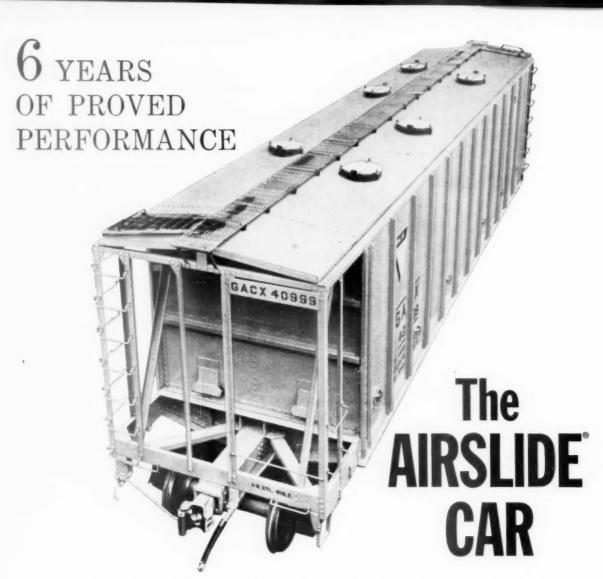
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Why Stagger Rail at Midpoint?

"The question of staggering rail joints is an interesting one to me, perhaps because my experience on European railroads during the war raised a continuing question in my mind. As a rank amateur in track matters (being a trainmaster), let me state the problem as I see it and ask for the opinions of the better qualified.

"In Europe, joints are squared but in America they are staggered. There is some good track on both continents, and also some that is not so good. It seems to me that either the European or American system is satisfactory, so long as the track is well maintained. It is only on secondary lines, where maintenance expenditures are necessarily minimal, that there might be a difference. Both systems have disadvantages. I understand these to be as follows:

"For squared joints:

"I. Because both wheels on one axle hit joints simultaneously, the entire weight on that axle is available to batter the rail-ends, wearing them faster;

"2. The tendency of the joint area to sink into the ballast (making low

joints) is enhanced;

"3. Because of low joints opposite each other, the entire end of each car can drop at the joint. This will bring about a pitching motion. The motion may not be harmful with European hook-and-link couplers, but with our couplers it might result in frequent break-in-twos.

"For staggered joints:

"1. Because low joints are opposite high centers, the cars of moving trains lean toward each joint, transferring the weight in a sideways motion that tends to spoil the alinement of the track;

"2. The distance from each joint on a given rail is the same to each adjacent joint on the other rail. This continues throughout considerable portions of the track. For example, it may be 19½ feet from the low joint on the north rail to the low joint on the south rail, 19½ feet from that point to the next low joint on the north rail, and 19½ more feet to the next low joint on the south rail, and so on for perhaps a mile. This situation sets up a rhythmic, harmonic rolling motion in the cars of a moving train;

"3. Because of the harmonic that is set up, the rolling of the cars is more severe than it otherwise would be. This increases the possibility of derailments, especially because of the contingent alinement problem (see 1 above);

"4. Also because of harmonic motion, the roll of the car to the right, for example, reaches its greatest just at the low joint on the right rail, the roll to the left is worst at the low joint on the left rail, and so on. This in turn drives each already low joint even lower, worsening the already bad condition;

"5. Because the very highest part of each rail (the rail center) is opposite the very lowest part of the rail on the other side (the joint), all these effects

are augmented.

"Now let me ask for opinions:

"Since there are difficulties in minimal maintenance with either squared or staggered joints, should we try a system that is neither: joints staggered by only a few feet, not half a rail-length? How many feet the spacing should be could be determined by experiment. It should probably not be the same as the wheelbase of a car truck, in order to avoid having two diagonally opposite

Conducted by George C. Randall, district manager, Car Service Division, retired, this column is a forum for questions railroaders are discussing today. We invite both questions and answers from all levels of responsibility. We'll pay \$10 for questions used.

Why Are Rail Joints Staggered at Midpoints of Rails? is a question first raised in this column in December.

Should Labor Agreements Specify Retirement Age? is a new question. It was suggested by a man who wondered why most industries other than railroads have fixed retirement ages. Mr. Wyatt is first to comment.

We'll have more on an earlier question. Do Intermediate Shippers Gain From Through Blocking?, coming up in our next column.

wheels on joints at the same instant.

"I have seen one example of joints staggered only a short distance. That was in France, during the war, and I had no opportunity to investigate it closely. Perhaps those of broader experience could give information on how such a plan would work out. If it did succeed, it might reduce the necessary frequency of lifting low joints on secondary lines, and thereby reduce the maintenance expense."—C. L. Marsh. Jr., trainmaster, New York Central.

Should Labor Agreements Specify Retirement Age?

"I think all railroad labor agreements should specify a definite retirement age for the following reasons:

"1. All railroad labor agreements with which I am familiar contain seniority provisions, and if the labor agreements provided a definite retirement age, each employee on the seniority roster would know just when he would retire. Consequently, he would have the opportunity to prepare him-

self from the day he is employed.

"2. Compulsory retirement would provide employment for young people at the period in their lives when employment is necessary to enable them properly to provide their families with adequate standards of living, such as buying homes, educating their children, and beginning their insurance and financial programs for later years.

"3. With increasing age, the alert-

ness, efficiency, and physical faculties of employees sometimes diminish. It is best for the safety and well-being of employees, and the operational requirements of modern railroad management, that there be an agreed-to retirement age.

"4. To accord all employees uniform treatment as to the time of their retirement."—H. C. Wyatt, vice president and general manager, N&W.

Switch to "Roller Freight"

1959

1958

1957

1956

1955

1954

1953

1952

1951

1950

1949

From 1949 to 1958, "Roller Freight" cars in service and on order rose from 1.522 to 25,265.

HERE ARE FOUR



1. Eliminating the hot box problem. That's one big reason why more and more railroads are switching to freight cars on Timken' tapered roller bearings. For example, The Quebec, North Shore & Labrador Railway, 100% "Roller Freight", had only one overheated bearing in over 300,000,000 car-miles. That's because Timken bearings roll the loads; there's no sliding friction.



2. Better, faster shipments is another big reason why 84 railroads and other car owners have made the switch to "Roller Freight". Case in point: to assure getting porkers to market faster and with less weight loss, the Northern Pacific rebuilt 200 special stock cars—"Pig Palaces". They're all on Timken bearings. With Timken bearings to eliminate hot box delays, they make the run in record time. And Timken bearings give smoother rolling, cut starting resistance 88%, make jolt-free starts possible, help reduce damage to lading.

BETTER-NESS rolls on

TIMKEN

First in bearings for 60 years

gains momentum!

8,862 "ROLLER FREIGHT" CARS ORDERED IN FIRST QUARTER OF 1959

ALMOST 40,000 CARS NOW ON TIMKEN* TAPERED ROLLER BEARINGS . . . 8,862 FROM JANUARY 1ST TO MARCH 31ST.

84 RAILROADS AND OTHER CAR OWNERS NOW USING "ROLLER FREIGHT".
EIGHT OF THESE ARE NEW USERS—JOINED SWITCH IN FIRST QUARTER OF 1959.

PERCENTAGE OF NEW CARS GOING ON TIMKEN BEARINGS ZOOMING . . . ABOUT 53% OF ALL NEW CARS ORDERED IN 1959 UP TO MARCH 31ST.

BIG REASONS WHY...



3. Cutting operating and maintenance costs. The Western Maryland reports that Timken bearings cut inspection time, save lubricant. Another railroad's Timken-bearing-equipped test cars rolled over 288,000 miles each in a 4-year period without adding lubricant. In terminals, Timken bearings can be inspected in 1/10 the time needed for friction bearings, will go 4 years without adding lubricant.



4. Greater return on investment. To get full service from their freight cars, car owners are putting more and more of them on Timken tapered roller bearings. Trailer-Train owners, for one, are 100% "Roller Freight"—and almost half of their 1,900 piggy-back cars are on Timken bearings. They do a year's rolling in a month.

By using revolutionary production methods such as our new Columbus "AP" bearing line, the cost of Timken bearings has stayed low while most everything else railroads use has risen sharply. When all freight is "Roller Freight" railroads will save an estimated \$288,000,000 a year, or \$144 per car, in operating and maintenance costs. The Timken Roller Bearing Company, Canton 6, Ohio. Canadian plant: St. Thomas, Ontario. Cable address: "TIMROSCO". Makers of Tapered Roller Bearings, Fine Alloy Steels and Removable Rock Bits.

tapered roller bearings





Rutland Gears Service to

With only 53% of its traffic originating or terminating on its sparsely settled lines in Vermont and northern New York, the Rutland has had to create a special character to keep its business.

As the "Green Mountain Gateway" route, it is making a name for itself for special service between New England and connections to the West. This is highly competitive territory. The road does have the advantage of a differential rate for westbound traffic, but most of its customers specify Rutland because of its dependable service.

Dependable service implies smooth operations. Rutland techniques are not unusual, although some of its operating characteristics are.

The Operating Story

For one thing, loads outnumber empties about three to one. For another, all trains are symbol freights, operating on regular schedules. A through freight train operates daily in each direction between Bellows Falls, Vt., and Norwood, N. Y. (northbound XJ-1, southbound JX-2). Also, a through freight with connections from XJ-1 and JX-2 operates daily except Saturdays between Rutland, Vt., and White Creek, N.Y., on Rutland tracks, and between White Creek and Chatham, N.Y., on trackage rights over the Boston & Maine and New York Central. Northward this is CR-3, southward RC-4. Local freight trains are operated in both directions over the entire system daily, except Saturdays and Sundays.

Rutland trains tend to be short. The average length for a recent month was 27 cars. All movements are according to timetable, regardless of tonnage.

In 1958, only 1,130 cars originating on Rutland tracks also terminated on line. There were 5,565 cars originating on line and delivered to a foreign line, and 18,208 received from foreign lines for points on the Rutland. Bridge traffic, with 22,309 cars handled, made up 47% of all traffic. This traffic is about equally balanced eastbound and westbound, although the differential tariff does not apply eastbound.

Business originating on Autland tracks for delivery on line improved substantially in 1958 over 1957. All other categories suffered from the general decline in carloadings.

Operations in 1958 were much the same as in 1957, even though bridge and interline traffic revenue was off. Because local traffic held up better, local and switching services stayed at the same level as in 1957, but a few through trains were canceled. Rutland philosophy is that if a line can't handle the offered traffic the traffic will hind some other way to go, and it will be difficult if not impossible to get back.

Traffic predictions are that 1959 will be a more favorable year. The Rutland expects revenues to pick up by about 8%.

Rigid adherence to schedule is neces-

sary if the Rutland is to handle its scheduled daily trains and six yards with 15 locomotives, a feat it has been managing since dieselization seven years ago.

Freight train speed on the line is high. In a typical recent month it averaged 21.1 mph. This was the highest speed in the New England region, and four miles an hour better than the 17.5 mph average for the eastern district as a whole.

During the same month, freight car miles per day on the Rutland averaged 40.0, compared with an average of 30.6 for the entire eastern district. The ratio of loaded car-miles to empties was 74.6, while the national average was 61.5. Only two roads in the country, the Spokane, Portland & Seattle and the Rio Grande, had higher loading ratios.

Rutland schedules are realistic but fast. OM-2, between Ogdensburg and Malone, for example, covers its 60 mile run in slightly less than two and one-half hours, averaging 24 mph. Turned around (as MO-1), it leaves Malone at 7 a.m. and is back in Ogdensburg at 10:30. Before it leaves Ogdensburg the next morning at 3:50, the road engine handles a day's switching assignments in Ogdensburg yard.

The longest crew-run on the railroad is on trains RC-4, and CR-3, a turn-around job from Rutland to White Creek, Chatham and return. The total distance is 230 miles. The run is made in 8½ hours for an average speed





MAIN-LINE TRAFFIC arrives in Rutland from the south over two lines. Train on left is arriving from Boston & Maine connection at Bellows Falls. Line on right leads to North Bennington and, via trackage rights, to Boston & Albany connection at Chatham, N.Y.

FAST SCHEDULES and dependable service are more important in Rutland operations than waiting for tonnage, so single units move most trains.

Sales and Stays in the Black

slightly better than 27 mph.

The longest train-runs, though, are symbol freights XJ-1 and JX-2 between Bellows Falls and Norwood. This is 252 miles one way, which requires three crews in each direction with change points at Rutland and Alburgh. Vt. Motive power goes straight through from Bellows Falls to Norwood on XJ-1, then right back on JX-2 from Norwood to Rutland, for a total of 452 miles.

Unlike New York state, which requires three brakemen on freight trains of over 25 cars. Vermont does not have any full crew law. Therefore, trains JX-2 and XJ-1 must have three brakemen on each side of the 95-mile run between Alburgh (in Vermont, 3.4 miles from the New York boundary) and Norwood. Only two brakemen are needed on these same trains between Alburgh and Bellows Falls, a run of 157 miles wholly within Vermont.

Bridge Traffic Preclassified

The Rutland maintains yards at Ogdensburg, Malone, Alburgh, Burlington, Rutland and Bellows Falls. These are flat yards, none of which has a daily volume greater than 200 cars.

One reason the Rutland is able to make good on its promise of reliable, fast service is that it preclassifies all bridge traffic for delivery to connecting lines. North and westbound cars are preclassified at Alburgh: south and eastbound at Rutland.

Deferred maintenance, particularly on the right of way, has been a problem. Tie renewals, bridge painting, and roadside and structure work that could be deferred without affecting safety, felt the effects of the revenue squeeze. Equipment maintenance was not much affected, at least in part because the line is already operating with the minimum number of locomotives needed to handle traffic.

Rutland section gangs have an average territory of 26 miles. There are 13 gangs, made up of a foreman and four men. The gangs have mechanized aids; tie tampers, spike pullers, gandy cranes, etc., to help them cover a lot of ground. Eleven trucks are assigned to the engineering department for off-track M W work. Headquarters at Rutland also has available bulldozers, a Lorain crawler crane, a Koehring crane with rail-aid car, a weed burner and other specialized equipment.

All but one of the Rutland's 15 locomotives are Alco road-switchers (the exception is a 660-hp G-E switcher). Nine units are 1,600 hp; five are 1,000 hp. Like most of the road's new freight cars, all motive power is owned outright.

With a high percentage of new cars (391 out of a total ownership of 512 are under four years old). Rutland's bad-order ratio is low: 2.3% in a recent month. The hotbox ratio is also low, averaging around 900.000 car miles per set off. Most Rutland cars are equipped with lubricating pads. The

line has even put some pads on locomotives on a test basis.

All the road's new equipment bears a distinctive green and gold color scheme that is becoming a Rutland trademark. After several years' experience with the colorful paint job, the Rutland feels the small extra sum spent on paint is money well spent for the favorable impression it creates.

Future Looks Promising

The Rutland is optimistic about the future. Although the line partly parallels the St. Lawrence Seaway, it doesn't expect to be greatly affected by its new neighbor. New York's booming "North Country" along the Seaway is served by the Rutland's line to Ogdensburg. The road expects that increased business in this territory will compensate for business that might be lost to the water route.

If business picks up and money again becomes available for capital improvements, the Rutland would like to get at least one more road-switcher and some new gondola cars to cut maintenance costs. More money would also be spent on maintenance of way, particularly tie replacements and stone ballast.

Rutland's fixed charges are low, and the road has the capacity to handle more volume without greatly increasing costs. One or two new industries on the line—not an unlikely prospect could improve the railroad's revenue considerably.



What is it?

It's one of the ,big new diesel freight locomotives that Santa Fe is now putting into service.

There will be 69 of them -2,400 horsepower each, adding 165,600 "husky horses" to the Santa Fe fleet.

They are moving freight across the country for our

shippers on fast and dependable Santa Fe schedules.

These new power units will give Santa Fe a total of 1,810 diesel locomotive units. More than 2,600,000 horsepower to help Santa Fe serve America's fastest growing area.

SANTA FE SYSTEM LINES

Serving the West and Southwest



Machine Cuts Track Labor Need

Manpower requirements have been reduced by a new machine that quickly removes old ties and lines the track behind an undertrack plow.

The machine, in service on several railroads, reportedly saves the labor of 18 to 25 men. Designed for use with the Mannix undertrack plow and sled, it is operated as an integral part of those devices.

The plow and sled were considered "fantastic" by some trackmen when they were first offered to railroads. Trackmen had always been taught that crossties must not be moved from over their beds because the track would then ride "hard" and "soft." Yet here was a device which, when introduced beneath the ties and pulled by a locomotive, raised every crosstie off its bed as it plowed the old ballast out to the sides or raised the track on the old or new ballast.

Experience with the plow and the sled refuted the theory that tie beds should not be disturbed, according to those who worked with the devices. It was also found that operation of the plow permitted removing the old ties economically while the track was in a raised position. It also allowed insertion of new ties while the track was in a skeletonized condition.

However, four men with mauls were usually required to knock failed ties loose from the rails. Several others were needed to pull the ties and loose tie plates from beneath the track. In addition, passage of the plow or sled often allowed the track to settle to the roadbed out of true alinement, and a gang was needed to line the track.

These manpower requirements are largely eliminated by two features incorporated in the new unit. One consists of mechanical means of knocking down and ejecting the ties to be renewed. The other feature brings the track approximately to the desired alinement. Other devices in the unit are designed to facilitate removal or insertion of the undertrack plow (or sled) without using a bulldozer or other equipment, and with fewer men.

Overall length of the new machine is 56 ft for single-track work, and 5 ft longer for double track. Two shallow steel trusses extend the full length of the machine and are supported at the ends on four-wheel trucks or carts. On the trusses are supported an assembly of rams, side booms, rail clamps, and other devices, plus controls for governing the various functions.

When in operation, the tie ejectorliner is attached at the front end to an undertrack plow or sled which is



TIE EJECTOR-LINER was developed to minimize the number of men required to remove ties and line track when using an undertrack plow or sled. A heavy upright yoke, to which the head truck is pivoted, is used to anchor it to the plow or sled.



NUMBER OF MEN required when the plow only is used is indicated by this view. Men with mauls must knock the failed ties loose from the rails, and more men are needed to remove the ties and any loose tie plates. Additional men are required for relief of the men with mauls.

pulled ahead by a work train. The unit may be detached and used solely as a track-lining machine, in which case it is operated under its own power.

The trusses provide the length and rigidity required by the unit's track-lining feature. When lining track, the machine makes use of three separate pressure points: the front and rear trucks and a liner head mounted between them near the middle of the main frame. By applying side pressure, either to the front truck or the liner head, the skeletonized track is easily lined before it settles on the smoothed roadbed.

A horizontal ram with a total movement of 24 in. is used to move the liner head laterally in either direction with respect to the main frame of the lining machine. Hence, track can be thrown 12 in. in either direction.

Removing ties by means of the new unit is achieved by two features incorporated in it directly behind the plow. The first consists of two hydraulic hammers, one on each side, for knocking down the old ties (previously marked with keel) while the track is in a raised position. The other is a 36-in-wide endless belt conveyor, drawn behind the plow underneath the track, which throws out the ties knocked down on it by the hammers.

The hammers, of the instant-action type, are suspended from the sides of the main frame in position to strike the tops of the ties at their ends. They are actuated by an operator who presses electric push buttons, one on each side, whenever he wants to eject a tie. The tie-ejector belt can eject ties to either side of the track.

Various features on the tie ejectorliner frame facilitate insertion or removal of the plow or sled, and also the handling of the machine as a whole to and from the track. These include four rail hooks, four raising rams, two side booms and a hydraulic winch.

When a raising ram is extended, the base engages the ballast between ties

outside the running rail. Further extension of the ram causes the liner frame to raise, the rail hooks to engage the underside of the rail, and the track to be lifted bodily. Track can be raised in this manner as much as 36 in. While track is raised, the side booms and winch are used to pull the plow or sled beneath the track, or from under it.

In addition to the saving in labor, the Mannix tie ejector-liner is said to have other advantages. Because of the time saved in the track-lining operation, it is now possible, according to J. W. Christoff, vice president of Mannix International. Inc., to perform a complete cycle of plowing, renewing ties, unloading ballast, sledding, unloading more ballast and surfacing on a given stretch of track in a single day.

Formerly, when using an ordinary plow, the usual practice was to sled in a single day the track that had been plowed for several previous days. The overall result. Mr. Christoff adds, is increased production.

Railroading



After Hours with



TRAIN RIDES FOR REST—I see where the magazine "Management Methods" is

advising its readers to ride trains—as a means of relaxation, and for thinking without frequent interruption. The magazine cautions its readers, though, against club cars and other spots where they might be tempted to visit with fellow passengers.

Every form of transportation has its advantages—and speed is not the only one. The steamship business doesn't seem to be hurt much by air competition—in spite of a speed disadvantage that is much greater than the railroads'. People are still sold on the comfort of ship travel.

The special attractions of rail travel have never been adequately proclaimed or generally accepted. I remember running into an acquaintance at St. Louis Union Station a number of years ago. He'd developed a case of insomnia and, he said, he always found train travel the only sure cure.

Some railroad men, however, don't sleep well on trains—especially on their own roads. They're too curious—checking up on just where they are, and in figuring out what's going on.

MORE ON "19" AND "31"—Agent F. X. Langer of the Minnesota Transfer has sent along what sounds like pretty authoritative advice on "19" and "31" and other numerical code symbols. Other such are "9 for pink or rush. 13 for I understand. 23 for you and others. 73 for best wishes."

The numbers 4, 6 and 8 are not used, he says, because they're a little more difficult to send and receive—since one dot more or less would change the meaning. Mr. Langer believes that "19" and "31" were picked because of the ease of distinguishing them. And the same goes for the International Morse signals "SOS" and "CQ." The

"OS." he says, is generally accepted to mean "out station."

USEFULNESS IN RETIREMENT—Retired from active railroading, T&P's

former chief executive, W. G. Vollmer, is keeping up his unremitting campaign to awaken Americans to appreciation of personal liberty, as a gift from the Almighty—and as the source of all material well-being. I've just been reading a fine commencement speech he recently delivered at the School of the Ozarks, Pt. Lookout, Mo.

"Many of us think that most everyone elsewhere in the world lives about as we do." he told his audience. "The opposite is true. Our way of life is anything but normal for a billion people on this earth."

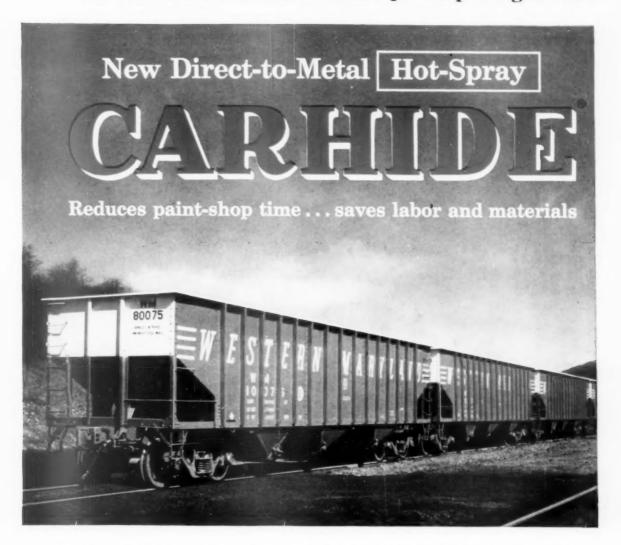
Whether we keep our advantages, or allow them to slip away, depends pretty much on whether Americans awaken to such messages as WGV's. If anybody has a more constructive retirement avocation than Mr. V., I'd wonder what it could be.

BOOKS THAT HELP—E. C. Ziesel of Warren, Ind., pays tribute to a famous railway book of many years ago, "Letters from an Old Railway Official to His Son" by the late Charles Delano Hine—a work published over a half-century ago by our company.

Mr. Ziesel said he used the book as a guide to his selfeducation, and found it most helpful. He believes it still would be, to young railroaders of today.

Many people have found deep inspiration or guidance in contacts with particular people. Who are the persons—in the past or at present—who in this way have contributed (or are contributing) the most to railroading? I have a few nominations of my own, but I'll hold off with them for the time being—to see whether readers have any to make, that they really feel deeply about.

Prime and finish coats in one application on WESTERN MARYLAND open-top freight cars



There's no need to use a priming coat when you paint freight cars with Pittsburgh's new direct-to-metal Hot-Spray Carhide. This latest addition to the group of famous Carhide railway finishes contains rust-inhibitive pigments that eliminate the necessity for this separate operation.

 With a single cross-coat application this new finish provides dry film thickness equal to conventional primer and finish coats. It's so fast drying cars can be stenciled the same day, saving labor, material and time in the paint shop.

• Direct-to-metal Hot-Spray CARHIDE goes on uniformly and dries to a smooth, durable surface that provides protection for many thousands of miles of severe operating and weather wear. We'll be glad to furnish additional data on direct-to-metal Hot-Spray CARHIDE. Get in touch with Pittsburgh Plate Glass Company, Industrial Finishes, 1 Gateway Center, Pittsburgh, Pa.

PITTSBURGH RAILWAY FINISHES

PAINTS . GLASS . CHEMICALS . BRUSHES . PLASTICS



IN CANADA: CANADIAN PITTSBURGH INDUSTRIES LIMITED

SINCO
CAR OIL
#355

A Revolutionary New Premium-Type Car Oil to Help You Cut Costly Delays Due to Hot Boxes

Field and Laboratory Tests Prove that Sinco Car Oil #355, Compounded from Natural High Quality 100 Plus V.I. Oils (No V.I. Improver), Gives You Important Advantages.



All-weather protection - will not congeal in cold weather nor thin out under heat.

Better oil cushion between bearing and journal.

More rapid flow through waste or pad to guarantee instant lubrication.

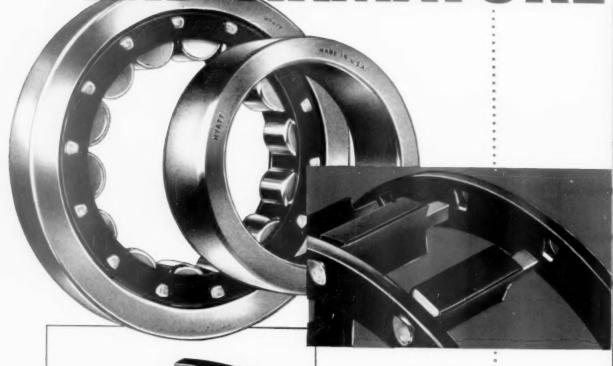
Anti-rust and oxidation inhibited.

For additional information, contact Sinclair Refining Company, Railway Sales, 600 Fifth Avenue, New York 20, New York. Chicago • St. Louis • Houston.

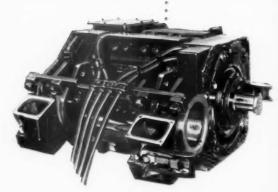


Sinclair Railroad Lubricants

RAILROADS OUTSTANDING BY NEW END_ARMATURE







REPORT PERFORMANCE HYATT PINION BEARING

Self-locking cage bar construction of the allsteel roller-riding cage makes the difference

Almost a year ago, we announced a major improvement in the design of the original steel roller-riding cage which HYATT pioneered in 1953. Exhaustive tests indicated that this new self-locking cage bar construction provided the most rugged pinion end armature bearing ever built.

Thousands of there new bearings are now in regular service—and the reports of their outstanding performance fully confirm our own tests. They've proved beyond the shadow of a doubt that they can really take it and keep coming back for more punishment!

Remember, only HYATT offers this new construction *plus* all the inherent advantages we introduced in the original roller-riding eage:

- 1 Larger rollers for greater load capacity
- 2 No rubbing contact between cage and race flanges
- 3 Cage and rollers removable as a unit
- 4 Unrestricted lubricant flow to all parts

For the last word in traction motor bearings, specify HYATTS for your new locomotives and for replacement. See if they don't out-perform anything you've ever used! Hyatt Bearings Division, General Motors Corporation, Harrison, New Jersey.





INTERIOR SHEATHING of new Union Pacific cars will be sprayed with Insulmat before insulation is applied. The main floor corrugations are to be cork filled.

UP To Get New Lounge-Diners

The Union Pacific soon will receive the first of ten 85-ft lightweight lunch counter cafe-lounge cars being built by the St. Louis Car Company.

Various features of the railroad's present dining, lounge and lunch counter cars will be combined for the car's interior arrangements, making them entirely different from any previous UP equipment.

Five of the cars will replace present diner-dormitory cars on the "Challenger." The other five will go into the "City of Portland." When the "Challenger" ends its seasonal service, its share of the new cars will go into the "City of Los Angeles." In both "City" trains, the cars will augment existing dome diners.

Each car will have a dining seating capacity of 32, including 8 at the snack bar. The lounge provides an additional 16 seats, and offers conversion possibilities to an additional six tables for dining service.

The cars will be fully self-contained. Each will have an axle-driven motor-generator, battery and one 12-hp-motor-driven air conditioning compressor operated in conjunction with evaporative condensers, all underneath the car. Two inter-connected underneath water supply tanks of welded stainless steel have a capacity of 400 gallons. A 55-gallon overhead tank supplies hot water. The Vapor hot water heater has a capacity of 240 gallons per hour.

The underframe will be high tensile, low carbon alloy steel welded construction, with center and side sills and side plates in one continuous length. Crossbearers, floor supports and longitudinal floor stringers are LAHT pressed channels and Z sections. Side framing side sill members are aluminum.

The General Steel Castings platform end castings are low carbon nickel steel. They extend through the bolster with east integral end sills, body bolsters, draft gear and coupler carrier, with separate 24-in,-diameter cast steel center plates. Alclad aluminum alloy, girder type riveted construction super-structure will be used.

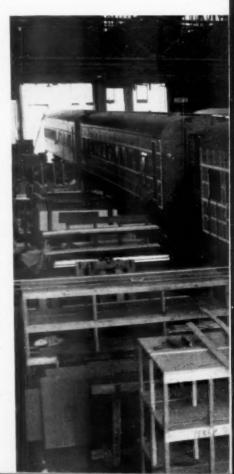
Wide use of aluminum extruded channel and Z sections is provided for. Side and end sheathing, roof sheets and gutters will be of aluminum alloy. Skirting applied to both sides of each car at side sills is to be 4 in. wide, extending the full car length.

Tempered Presdwood will be used for wainscoting, pier and frieze panels in the dining room, outside wall of passageway and dining side of the lunch counter section. The kitchen and service wall of the lunch counter section will have steel wainscoting, pier and frieze panels. Paint finish in the kitchen will be glossy white. Bulkheads and partitions are metal-covered 1/2-in. plywood, double faced with aluminum. The ceiling, 12-gage aluminum throughout the car, is equipped with slip joints in the main compartment. Glass wool insulation is to be 3 in. thick for the floors, sides, ends and roof,

The interior surface of the car sheathing will be sprayed with 1/8-in. Insulmat: 3/16-in. on top of the stainless steel sub-floor. The main floor consists of special pressed 22-gage stainless steel with corrugations 1 in. high and 112 in wide riveted to the floor supports. Top and bottom corrugations are filled with cork cemented in place. A top layer of 1-in. Armstrong cork base is to be laid in cement 18 in. thick to form a smooth top surface. Where the floor is to be covered with rubber, a layer of 1 s-in. Presdwood is applied over the cork. Fabreeka sound deadening materials will be used where re-

EXTERIORS of new UP cars feature aluminum alloys.

The air conditioning system is designed to maintain temperature at 76 deg when outside temperatures range from 110 to 120. Two fresh-air intake ducts will be connected to the evaporator chamber and equipped with intake hoods, water and snow eliminators. Overhead ducts will be aluminum. The main air duct has an area of 2 sq ft. Air supply in the lounge, dining and lunch counter sections is through Pyle-



National multi-vent panels; in the passageway, through anemostats. Recirculated air is arranged through a grille and register and is preset with fresh air. Both will provide not less than 2,000 cfm. Hooded exhaust air ventilators will be on the car roof.

Air conditioning will be provided by one 8-ton motor driven compressor, a full flooded condenser unit of copperfinned copper tubing, and an 8-ton evaporator with an integral copper tubing steam heat coil of 100,000 btu minimum capacity, designed to handle not less than 2,000 cfm of 25 deg entering air.

Blower fans are direct motor driven and discharge air into the main air delivery duct at ceiling. The kitchen ventilating system and the sizes and number of fans will provide not less than 24 complete air changes per hour. A thermostatically controlled Vapor steam heating system will be used, with two separate steam regulators for overhead and floor heat. Unit copper finned copper tube radiation will be applied at the floor on each side of car. Tubing will be arranged to insure proper heating at car ends.

Lunch counter chairs will be of the pedestal revolving type with upholstered foam rubber custion seat and back. Dining chairs are of tubular construction, with foam rubber backs and cushions. The double width, double glazed breather type aluminum windows, supplied by Adams and Westlake, are glazed with Libby-Owens-Ford polished heat absorbing and safety plate glass. Windows and cable curtains are to be equipped with 134-in, light excluders.

White nickel-bronze window guard brackets with stainless steel rods are applied to windows in passageway and kitchen and lunch counter section. The kitchen will have stainless steel covering on the side walls, end walls, and partitions extending up to the belt rail, with all joints welded watertight.

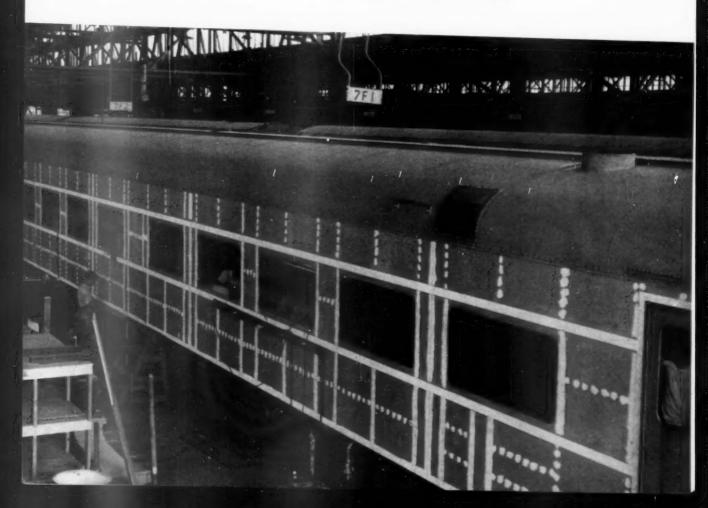
Carpet in the dining room and lounge section will be applied over 38-in sponge rubber padding. Encaustic tile will be used in the passageway along the kitchen and in the area behind lunch counter. The lunch counter dining space floor will have Goodyear Wingfoot rubber covering. Sectional maple floor gratings will be used over the stainless steel kitchen floor.

A De-ion type circuit breaker switchboard, including two main light and 12 branch circuit breakers, will be used. The train line circuit breaker has a capacity of 225 amps and is mounted on a separate panel with a battery switch. Two separate circuits for controlling lights run from two light circuit breakers on the main switch panel. One lighting circuit is arranged for three night lights. All train line wires and cables terminate in a junction-boxequipped terminal board before entering the train line receptacles.

The General Steel cast steel four-wheel trucks will have all coil equalizer and bolster springs and outside swing hangers. They are equipped with E-26 multiple wear rolled steel wheels and 6 by 11 axles. The trucks have a 9-ft wheel base, 14½-16-in, pedestal openings for grease lubricated roller bearing boxes, rubber cushioned pedestal liners, bolster anchors. They are arranged for Budd frame hung disc brakes.

The cars will have New York Air Brake HSC electro-pneumatic equipment. AP decelostat wheel slip control, and a 26C control valve with electro-pneumatic control. Air brake piping above the floor is to be hard copper tubing of K section. Standard AAR pocket draft gear includes H-81 tight lock couplers and Y-65 short vokes.

The cars will be equipped with an RCA transistor radio receiver with power amplifier and in-line di-pole antenna. Six 8-in. speakers will be recessed behind grilles in the ceiling of the lounge, dining and lunch counter sections.



GENERAL ELECTRIC SHOWS HOW YOU CAN . . .

Reduce your locomotive gear maintenance costs

CHECK THESE DANGER SIGNS AND MAIL THE COUPON





FOUR DANGEROUS SYMPTOMS of gear wear can be seen above:

Metal fatigue results from repeated and long-term load application;

pitting results from heavy overloads and inadequate lubrication; high-





temperature metal-to-metal contact through poor lubrication causes scutfing; tooth surfaces become scored by particles of foreign matter in the lubricant.

GENERAL ELECTRIC LOCOMOTIVE GEARING is as accurately constructed and thoroughly tested as the finest of machinery. Check your gears at regular intervals to prevent them from becoming a total loss—damaged beyond repair. Not only will damaged gears take your locomotive out of service for gear replacement, but defective gearing often causes traction motor failures.

That's why you can save maintenance dollars if you keep a careful watch on the involute tooth profile. When your gearing starts to show excessive deviation from profile, vibrations produced will damage your equipment. As soon as profile deviation enters danger area shown on chart above, it's time to let G.E. save your axle gear through expert reprofiling.

MATERIALS AND PROCESSES SPECIALLY DEVELOPED

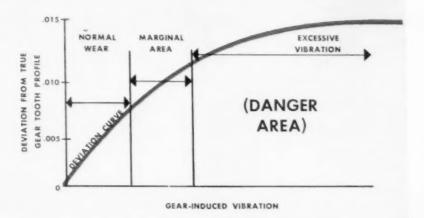
for transportation equipment are used in manufacturing your gearing. Proper heat treatment assures a tooth surface hard enough to withstand long periods of severe abrasive conditions—yet tough enough to absorb repetitive, high-impact loads. This helps reduce failures and resulting down time for your locomotive. The steel used is a forged, heat-treated carbon steel which provides a hard exterior tooth, blending gradually into a tough, softer, but more flexible core.

STRONG, DEPENDABLE GEARS AND PINIONS form the heart of the locomotive transmission system. The smooth and uniform transmission of driving power from traction motor to axle demands gearing that can stand up to the continual punishment of heavy loads

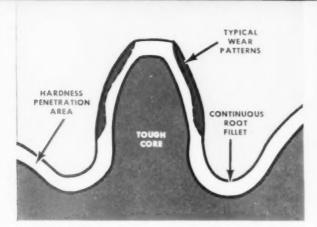
Progress Is Our Most Important Product

GENERAL 👺 ELECTRIC

CHART AT RIGHT shows when your gears and pinons are becoming dangerously worn. If the tooth profile has deviated too far from its true configuration, there will be excessive gear-induced vibration. Prompt reprofiling will save your gearing and motor components for many more miles of productive service.



BELOW FOR MORE DETAILS ON WHEN TO RESURFACE



RED AREAS SHOW typical wear patterns on this profile view of G-E gear tooth. Hardness penetration area is a layer of extremely durable, heat-treated carbon steel. Continuous root fillet reduces tooth breakage.



FINAL CHECKS LIKE THIS ONE—using portable involute profile checker—help inspection of tooth profile accuracy.

at high speeds, often combined with sudden starts and stops. To help achieve this high level of performance, the General Electric-designed long and short addendum tooth form and continuous radius fillet provide more strength and longer life. Special protuberance hobbing techniques help to eliminate the danger of grinding cracks in the roots. Special heattreating techniques also provide a uniform, hard overlayer of steel—containing the desirable compressive residual stresses. G.E.'s manufacturing "know-how," coupled with these advances, helps produce a longer-lived gear to handle today's heavier loads.

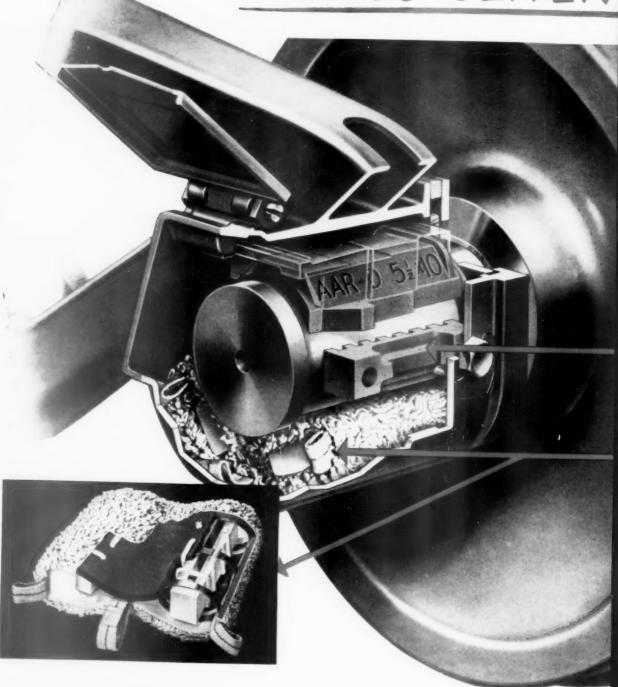
When you're thinking of NEW gearing—or resurfacing your old G-E gears—contact your nearest Railroad Regional Parts Center or Locomotive Builder. Investigate G.E.'s expert reprofiling service now—before your gears and pinions become too badly worn. General Electric Company, Locomotive and Car Equipment Department, Erie, Pennsylvania.

tric Co.
rsion of ready-reference Gear Mainte
nd causes of gear failure). I understan
ion by mailing this coupon.
STATE

GENERAL 🍪 ELECTRIC

NOW YOU CAN GET

10-TIMES-BETTER



BEARING PERFORMANCE

at a price you can afford to pay

Magnus Lubricator Pads maintain constant journal contact.

Even in coldest weather there's minimum displacement.

And R-S Journal Stops stabilize the

whole bearing assembly – virtually eliminate hot boxes
and cut maintenance costs all along the line.

MAGNUS R-S JOURNAL STOPS

Bolted to the inside of the box, on both sides of the journal, Magnus R-S Journal Stops positively prevent displacement of bearing, wedge or lubricator pad, even under severe humping, braking or road impacts. By *stabilizing* the entire journal bearing assembly they eliminate the major causes of bearing failures — increase miles per hot box *ten times*;

miles per cut journal, fifteen times! In short, they cut maintenance and operating costs all along the line — double bearing and dust guard life, reduce wheel flange wear, extend maximum safe period between repacks. Journal Stops increase new car cost by less than 2 per cent and pay for themselves in less than three years!

MAGNUS LUBRICATOR PADS

Designed by bearing experts, the new Magnus Lubricator Pad incorporates, in a unique one-piece, twin-lobe design, every desirable feature of pad construction. Three-way wicking—circumferential, internal and center feed—provides maximum oil feed from an abundant oil supply. Each pad holds more than $2\frac{1}{2}$ times its own weight in oil, provid-

ing an extra margin of safety when running on a "dry" box. Non-sagging internal flat steel springs, firmly anchored in place, hold the felt-backed tufted duck cover in contact with the journal at all times — winter and summer. And Magnus pads are self-centering on the journal — there's minimum displacement even in coldest weather.

For complete information on Magnus Lubricator Pads and R-S Journal Stops, write to Magnus Metal Corporation, 111 Broadway, New York 6, or 80 E. Jackson Blvd., Chicago 4.





SOLID BEARINGS R-S JOURNAL STOPS LUBRICATOR PADS



MAGNUS METAL CORPORATION Subsidiary of NATIONAL LEAD COMPANY

People in the News

ALTON & SOUTHERN.—James Davies, chairman of the board. East St. Louis, Ill., retired July 1, after more than 36 years of service. R. K. Heineman, president, will act as board chairman without change of title.

AMERICAN REFRIGERATOR TRANSIT COM-PANY.—Thomas E. Fox, vice president, elected



Thomas E. Fox



F. A. Pouliot



Donald L. Engel C&EI



Walter L. Young N&W



Benton E. Crumpler N&W



I. T. Marine PRR



H. H. Ramsay



Henry W. Large



V. J. Floyd PRR



PRR

president and general manager, succeeding Oliver M. Stevens, who retired June 30. B. A. Stege, Jr., assistant auditor, appointed assistant to the president and secretary.

ASSOCIATION OF AMERICAN RAILROADS.—Wilbur E. Henry, Jr., appointed a special representative, News Service, Washington, D.C. Mr. Henry was formerly chief of press relations, American Legion, Washington head-quarters.

CANADIAN PACIFIC.—J. R. Strother, general manager. Eastern region, Toronto, Ont., transferred to the Atlantic region, Montreal, Oue. S. M. Gossoge, vice president, Eastern region, Toronto, named vice president and general manager of that region. G. E. Meyne, vice president, Prairie region, Winnipes. Man., appointed vice president and general manager of that region. J. N. Froine, vice president, Pacific region, Vancouver, B.C., named vice president and general manager of that region. F. A. Pouliot, general superintendent, Quebec district, Montreal, promoted to assistant general manager. Atlantic region, at that point. W. R. McCracken appointed superintendent. Medicine Hat division, Medicine Hat, Alta.

appointed superintendent, Medicine Hat division, Medicine Hat, Alta. Reginald Stetter, CP steamship general agent, Chicago, named CPR general agent, Detroit, succeeding Forrest F. Hordy, who retired June 30.

CHESAPEAKE & OHIO.—K. K. Blyth, assistant general freight agent, Detroit, appointed assistant freight traffic manager there, succeeding J. H. Suthonn (RA, June 22, p. 70). A. F. Holler, general agent, Detroit, replaces Mr. Blyth and is succeeded by L. R. Butterfield. John L. Chombers appointed general agent. Richmond, Va., succeeding L. E. Nelsen, Jr., who has resigned, to join the Richson, Jr., who has resigned, to join the Richson, Jr., who has resigned, to join the Richson, Jr., who has resigned, agent. New York, appointed assistant freight traffic manager there, succeeding W. L. Gronzen, who retired June 30.

Robert E. Cross, assistant division engineer, Grand Rapids, Mich., promoted to division engineer there.

CHICAGO & EASTERN ILLINOIS.—Donold L. Engel, mechanical engineer, Danville, III., appointed superintendent mechanical department.

CLINCHFIELD.—Fronk D. Brewer appointed distriet freight agent, Atlanta, Ga., succeeding william F. Polmer, promoted to assistant traffic manager—sales and service, Erwin, Tenn.

Mr. Palmer replaces Joseph J. O'Connor, who has joined the Louisville & Noshville (RA, June 22, p. 70).

DENVER & RIO GRANDE WESTERN.—P. O. Spurgeon, general agent, Detroit, appointed traffic manager, Chicago, succeeding the late J. B. Williams. J. D. Key, general agent, Omaha, Neb., succeeds Mr. Spurgeon at Detroit. R. L. Toylor, general agent, Colorado Springs, Colo., succeeds Mr. Key at Omaha. A. L. Burson replaces Mr. Taylor at Colorado Springs, J. A. Studfer succeeds Mr. Burson as district freight and passenger agent at St. Louis, Mo., assigned to the New Orleans, La., territory, T. V. Simmons, district freight agent, 500 Fifth Avenue, New York, appointed general agent, Philadelphia, succeeding John J. O'Donnell, who retired June 30 because of ill health. D. S. Fowler succeeds Mr. Simmons, H. E. Cosh named general agent, Rio Grande freight depot, Alamosa, Colo. J. R. Cook, L. O. Wurm and W. A. Hollord appointed assistant general freight agents, and V. E. Hoos named assistant to Ireight traffic manager, Denver.

DETROIT, TOLEDO & IRONTON.—Thomos P. Woll appointed assistant general western agent, Chicago, Chorles F. White named traffic representative, 50 Church Street, New York.

ELGIN, JOLIET & EASTERN.—R. E. Gorren, trainmaster, appointed acting assistant superintendent. Gary division, Gary, Ind., replacing C. O. Ferner, transferred to Joliet, Ill. (RA, June 15, p. 38).

ERIE.—John F. Reynolds appointed division storekeeper, Hornell, N.Y., general store, succeeding Korney E. Peck, who retired June 15.

Harold C. Whitford, diesel maintenance instructor, Hornell, N.Y., appointed diesel supervisor, territory New York to Chicago and side lines, at Hornell, Mr. Whitford's former position abolished.

GAINSVILLE MIDLAND.—New officers elected following acquisition of this road by the Seaboard are: President, John W. Smith; executive vice president, J. R. Thorne; vice president—finance and accounting. L. L. Knight; vice president—freight traffic. John P. Derhom, Jr.; general manager, J. N. Broetzmon, comptroller, W. V. Lowrence; secretary, E. L. Losh, Jr.; treasurer, W. B. Pope; general solicitor, Chorles T. Abeles; chief engineer, T. B. Hutcheson, All have headquarters in Richmond, H. F. Lewis, general auditor for the GM, appointed supervisor of contracts of the Seaboard, Richmond, (RA, June 29, p. 66.)

GREAT NORTHERN.-Fronk J. Govin, chairman of the board of directors, St. Paul. Minn. retired May 14.

LACKAWANNA.—G. R. Morr appointed general freight agent—staff, New York. C. Fred Cotton succeeds Mr. Marr as division freight agent. Newark. Owen P. McKeever named general agent, New Haven, succeeding Mr. Cotton.

LEHIGH VALLEY.-Edwin C. Long, district freight agent. Boston, appointed general agent there, succeeding Affred W. Nelson, who retired July I. Edward J. Halleran, commercial agent. Boston, succeeds Mr. Long.

MILWAUKEE.-Harry Sengstocken, passenger traffic manager. Chicago, retired June 30.

MINNEAPOLIS, NORTHFIELD & SOUTHERN.—D. H. Reubish appointed western traffic manager; C. Edword Fronk named general agent, and E. J. Donke appointed traveling freight agent, all at Seattle, Wash.

Missouri Pacific.—G. M. Holzmonn, assistant general manager, Western district, Kansas City, Mo., appointed general manager, Western district there, succeeding C. F. Dougherty, retired, Mr. Holzmann's successor is D. T. Borksdole, division superintendent, Monroe, La., who in turn is replaced by J. C. Love, who has been assistant general superintendent of transportation, St. Louis.

NEW HAVEN.—Victor A. Gust, western traffic manager, Chicago, retired June 30. Rolph W. Nicholos, general traffic agent, Cleveland, appointed freight traffic manager, Chicago and will supervise traffic agencies at Chicago. Detroit, St. Louis, San Francisco and Portland (Ore.). Jumes E. Greeney appointed general traffic agent, Cleveland. Robert B. Round named district traffic agent. Poughkeepsie, N.Y.

NEW YORK CENTRAL.—John L. Muckenhoupt, assistant district perishable freight sales manager, appointed district perishable freight sales manager in the New York area, succeeding Morold L. Brown, who retired July I. S. Joseph Stinson, district freight sales representative, succeeds Mr. Muckenhoupt.

NORFOLK & WESTERN.-J. A. Conner, Jr. and L. H. Rives, foreign freight agents at Norfolk, Va.: Fred N. Megahan, district freight agent at Philadelphia. Pa., and R. M. Tolioferro, division freight agent at Winston-Salem, N.C., retired June 30. C. I. Britts appointed foreign freight agent, and F. P. Blockord and R. W. Kelley named assistant foreign agents, at Norfolk. C. R. Ford, commercial agent, Winston-Salem, N.C., succeeds Mr. Taliaferro, C. W. Stover, appointed division freight agent, Roanoke. Abolished title of general agent, Roanoke.

M. E. Bowmon, assistant superintendent, Norfolk Terminals, named general agent and superintendent, Norfolk Terminals, succeeding the late W. H. Jockson, William S. Bollord, trainmaster, Norfolk Terminal, succeeds Mr. Bowman.

Wolfer L. Young, assistant chief engineer, Roanoke, Va., promoted to chief engineer there, succeeding Arthur B. Stone, who retired July 1. Benton E. Crumpler, assistant to chief engineer, replaces Mr. Young.

Franklin K. Day, Jr., assistant general manager, Roanoke, appointed assistant vice president, a new position.

Thomas E. Moore, assistant chief special agent, promoted to chief special agent, Roanoke, succeeding Edmund S. Glass, who retired June 30.

PENNSYIVANIA.—Henry W. Lorge, assistant vice president, freight sales. Philadelphia, promoted to vice president and regional manager. Northwestern region, Chicago, succeeding Hermon H. Pevlor, who has been elected president of the Wobosh (RA, June I, p. 33). 1. I. Morine, general manager, freight sales. Philadelphia, succeeds Mr. Large. Williom K. Chopmon, freight traffic manager. Pittsburgh, replaces Mr. Marine, H. H. Romsoy, manager of freight sales and services, succeeds Mr. Chapman. V. J. Floyd, manager of industrial development, Southwestern region. Indianapolis, replaces Mr. Ramsay at Pittsburgh.

E. E. Kinzel, assistant director, real estate, appointed general manager, real estate, system. Philadelphia, succeeding J. W. Ewolf, director, real estate, assigned to other duties, E. H. Schwer, manager, real estate, Philadel-

phia region, appointed assistant general manager, real estate, system, succeeding Mr. Kinzel. Abolished positions of director and assistant director, real estate.

Dr. A. J. Mozzer, resident surgeon and medical examiner, Western Maryland, has joined the PRR as medical officer, Baltimore, Md.

RICHMOND, FREDERICKSBURG & POTOMAC.—
Louis E. Nelsen, Jr., general agent, Chesapeake & Ohio, Richmond, Va., has joined
the RFSP as freight traffic manager sales,
Richmond, succeeding Horoce R. Powell, who
retired May 31. L. Otto Meyberg, assistant
traffic manager, promoted to passenger
traffic manager, promoted to passenger
traffic manager, sales, named manager—
sales, named manager—
chief freight claim clerk, appointed freight
claim agent.

RUTLAND.—Bort Gorcio named district sales representative. Central region. He was formerly a representative of the St. Johnsbury & Lomoille County in upper New York State.

SEABOARD.-C. R. Dolby, Jr., commercial agent, St. Petershurg, Fla., appointed district freight agent, Raleigh, succeeding E. L. Hobbs (RA, June 29, p. 63). J. L. Gillespie appointed district freight agent. Gainesville, Ga.

SOO LINE.-E. Formoe, assistant superintendent transportation, Minneapolis, retired June 30.

SOUTHERN.-Robert B. Curry, comptroller, elected vice president and comptroller, Washington, D.C.

George A. Donsberry, assistant general freight agent, Jacksonville, Fla., appointed general agent. Savannah, Ga., succeeding George B. Miller, retired. Ben L. Skinner, commercial agent. Augusta, Ga., succeeds Mr. Dansberry at Jacksonville.

SOUTHERN PACIFIC.—J. Robert Code, purchasing agent.—Pacific Lines, San Francisco, has exchanged positions with George C. Freeborn, assistant general purchasing agent, system.

WATERLOO.—Effective July 1, S. G. Bucher appointed auditor of disbursements: E. Mech, auditor of freight receipts: J. L. Shorpe, auditor of passenger and station accounts: E. G. Cook, car accountant, all at Chicago.

WESTERN PACIFIC.—William D. Brew, assistant to general auditor—taxes. San Francisco, appointed auditor of miscellaneous accounts to succeed Henry C. Wendt, retired.

Colin C. Eldridge, transportation engineer, research section. San Francisco, named assistant to superintendent of transportation.

D. Robert Papera appointed market economist. Market Research Department.

OBITUARY

William J. Finegan, 61, real estate manager, Northwestern region, Pennsylvania, Chicago, died June 22 in Community Hospital, Geneva, Ill.

Supply Trade

South Bend Lothe Works, South Bend, Ind., has been acquired by American Steel Foundries, Chicago. The company will be operated as a sub-sidiary of ASF under the name South Bend Lothe, Inc. Russel E. Frushour continues as president and chief executive officer.

W. Lyle Richeson, vice president of Westinghouse Air Broke Co., Pittsburgh, Pa., has







Lawrence E. Walkley

been named vice president-assistant to president. Lowrence E. Wolkley, vice president and treasurer, has been named vice president—operations. Edward D. Greiner, secretary and treasurer of LcTourneau Westingshouse, elected vice president imance of WABCo. James D. Perley, director of employee relations, appointed assistant vice president—personnel. James A. Corlson has been elected secretary and in addition will handle stockholder and public relations, stock records and real estate.

J. E. Goodwin has been elected vice president and director of United Stotes Roilway Equipment Co., Chicago. Mr. Goodwin was formerly president of M. & J. Diesel Locomotive Filter Corp., which he and his associates have just sold to the National Waste Co.

W. Richard Murphy, assistant to president of Sporton Corp., Jackson, Mich., has been elected vice president and general sales manager of all divisions.

Horcourt C. Droke, consulting engineer, Sperry Products, Inc., Danbury, Conn., retired June 30.

Charles 5 Gravett, tailroad division manager of West Chemical Products, Inc., has been named sales manager of the New York hranch. Stonley Clork, assistant manager, Eastern railroad division, appointed manager, Eastern railroad sales division and National coordinator for the railroad department.

OBITUARY

Kenneth I. Thompson, 55, manager of railroad sales, Linde Co., Division of Union Carbide Corp., died June 29 at New York Hospital.

Dividends Declared

PITTSBURGH, FT. WAYNE & CHICAGO common, \$1.75, quarterly, 7% preferred, \$1.75, quarterly, paid July 1 to holders of record June 10.

PITTSFIELD & NORTH ADAMS 32.50, semiannual, paid July 1 to holders of record June

PROVIDENCE & WORCESTER. \$2.50, quarterly, paid July 1 to holders of record June 15.

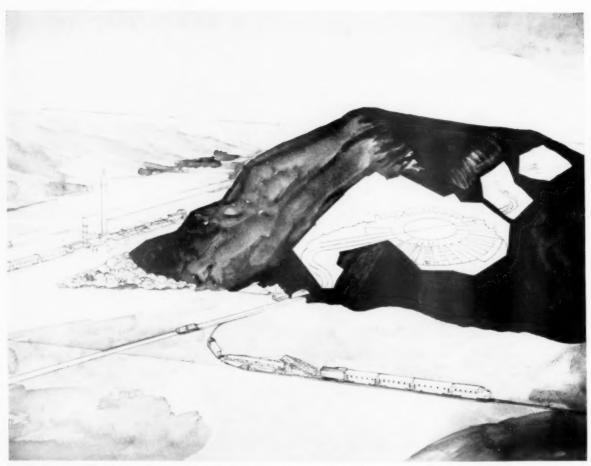
RICHMOND, FREDERICKSBURG & POTOMAC,—dividend obligations \$1, increased quarterly, voting common, \$1, increased quarterly, grant of control of the control of

SEABOARD - 50c, quarterly, paid June 26 to holders of record June 15.

UNITED NEW JERSEY RR & CANAL \$2.50, quarterly, payable Oct. 10 to holders of record September 18.

WARE RIVER-\$3.50, semiannual, paid July 1 to holders of record June 19.

WHEELING & LAKE ERIE_common, \$1.433/4 quarterly; 4% prior lien, \$1, quarterly, both payable Aug. 1 to holders of record July 10.



FLEXIBLE DEFENSE, based on a continuous movement of missile-launching trains, would be hard to knock out,

New Defense Plan: Missile Firing

Intercontinental ballistic missiles, ready to fire, may be regular passengers on American railroads starting in 1962. The ICBM's would become travelers to give the nation a better defense against a sneak nuclear attack.

The theory is that present underground bases at Cape Canaveral, Fla., Eglin Field and on the West Coast would be tempting targets for an enemy because their locations are fixed. An enemy would know exactly where to aim his weapons.

Missiles on railroad cars, on the other hand, could be anywhere on the 218,500 miles of line operated by American railroads. They could be disguised as any one of approximately 30,000 trains in daily service.

"We believe it would be almost impossible for a potential enemy to spot our camouflaged launcher-trains in this giant complex," an official of one of the firms that worked out plans for the missile train commented. "These trains could get under way at a moment's notice. Trying to hit them with a missile would be like trying to find a needle in a haystack. Some of the launcher trains could be on the move 24 hours daily; others could be dispersed at sidings, in mines and tunnels, and still others in industrial warehouses along the roads.

"A system which would deploy our missile capacity in this manner would be fair warning to a potential enemy that any advantage he might enjoy through a surprise attack would be short-lived. He would have to count on being hit, and hard. We believe the development of an effective mobile system of this type could be a strong deterrent to a global nuclear war."

Design work for the launcher train is the joint product of two firms with long experience in missile work: Bethehem Steel Company's Shipbuilding Division—Central Technical Department and Paul Hardeman, Inc., a missile-engineering firm in Los Angeles.

Officials of the two companies said they believe their organizations were "pioneers" in the development of a mobile ICBM weapons system. They formally approached Defense Department officials last fall, have had several meetings with defense officials in the interval, and are now ready to proceed with the design and construction of a prototype "as soon as we get a contract from the Pentagon."

The launcher train would be made up of a number of cars, which could be disguised as either freight or passenger equipment, pulled by a standard



MISSILE CARS could reload quickly.



LAUNCHINGS could be made at will.

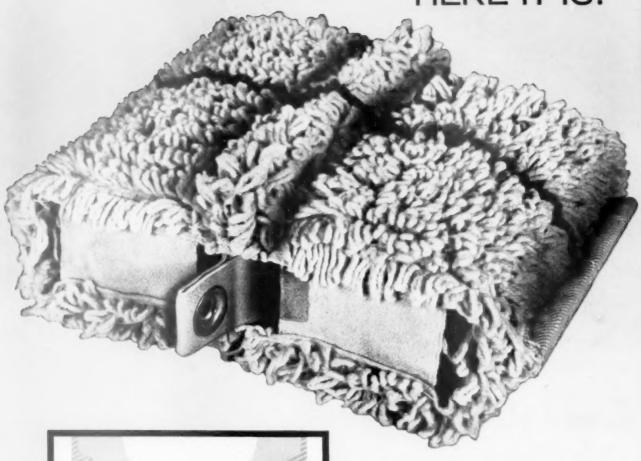
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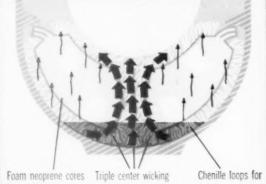
locomotive. Solid-fuel. "Minuteman" missiles would be carried in cars especially designed to protect them from excessive shock and temperature changes. A self-contained erector would be used to put the missile in firing position on the launching car, which would utilize flame shields and stabilizers. Target data for the firing would be obtained from another car, using pre-charted calculations. A command car and other cars for personnel would make up the consist.

The launcher train would stop at a designated location and could fire its first missile within minutes after receiving a firing signal. When a given train had exhausted its missiles, it could reload at any of several hundred warehouses that would be provided for the purpose. Any desired number of trains could be operated.



HERE IT IS:





Foam neoprene cores have both wicking and pumping action

Triple center wicking action, direct from bottom of box to journal

Chenille loops for resiliency, wicking and distribution

Triple center wicking action feeds an abundant supply of oil to the journal by the most direct path. More oil flows up through the neoprene cores and still more wicks up through the fabric panels, assuring complete saturation of the chenille cover at all times.

American Brake Shoe's ABSCO lubricating pad... with the best of everything!

The Absco journal lubricating pad is the first and only pad to be engineered and produced with *all* the advantages and characteristics that critical railroad men prefer! Check off this impressive combination of features—combined for the first time in the simple, economical Absco pad:

Dimensional accuracy. All parts precisely cut and assembled. Materials pre-shrunk to maintain accurate size, even after renovation.

Strong pull-out strap. Withstands tremendous pull! Double thickness is triple sewn throughout center section, with a brass grommet through double thickness at each end.

Positive wicking action. Special twisted loop chenilling distributes steady flow of oil over entire journal. Specially engineered center section provides additional path for direct wicking action at shortest distance between free oil and journal. Foam neoprene cores provide further wicking capacity.

Identification. Simple stamped brass tag.

Interchangeability. Absco pads fit standard A.A.R. journal boxes. No modifications necessary.

Ease of application. Easily installed. No tools required. Reversible side to side, top to bottom, end for end.

Stability. Sturdy fabric retainers resist shifting, even at low temperatures.

Resilience. Foam neoprene cores, specially compounded for high resilience with great resistance to set. The compressible chenille loops add to overall resilience. Ease of renovation. Built to withstand roughest cleaning methods. No delicate or heavy metal parts to break or tear loose.

Long life. Accelerated life tests indicate durability far in excess of the present renovation interval, even under extreme service conditions.

Non-linting. Thoroughly washed and pre-shrunken cotton wicking material was especially selected for its non-linting characteristics.

One piece. No separate pieces or retainers.

Minimum metal. The only metal parts are the two brass grommets and the brass identifying tag.

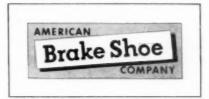
Oil retention. Our tests show fully soaked pads retain approximately 2,000 grams of oil after 3 hours draining.

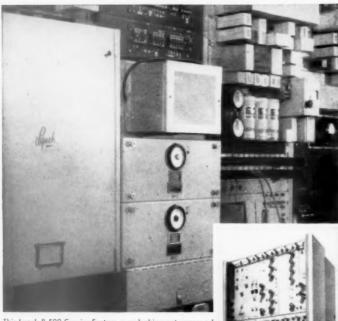
Ruggedness. Built to take the toughest treatment—during installation, operation, removal, and renovation. Nylon stitching throughout.

This impressive combination of features and advantages is exclusive with the Absco lubricating pad.

RAILROAD PRODUCTS DIVISION

530 Fifth Avenue, New York 36, New York





This Lynch B-500 Carrier System, a rush shipment arranged by Graybar, gave the Missouri Pacific urgently needed extra voice circuits over a distance of 345 miles. Installation and checkout time: 1 week.

How the Missouri Pacific
cut in extra voice circuits
between St. Louis and Little Rock — FAST....

with a LYNCH B-500, "O"-TYPE CARRIER SYSTEM

After a major extension of their lines recently, the Missouri Pacific Railroad needed—urgently—additional voice circuits between St. Louis and Little Rock. Graybar arranged a rush shipment of a Lynch B-500 4-Channel Carrier System, including three repeaters.

"High grade," said Mr. R. A. Hendrie, Missouri Pacific's General Superintendent of Communications, "Compact, Tie two wires to it

and you are in business."

Lynch B-500 Systems—available from Graybar—can provide up to 16 additional channels. Simple to install and maintain, the Lynch B-500 provides wide band voice frequency circuits, and requires a minimum of rack space. With it, speech plus duplex telegraph circuits can be applied over any voice channel.

For experienced help on communication needs of all types, and on-schedule deliveries of anything electrical, call your nearest Graybar office. Graybar Electric Company, Inc., 420 Lexington Avenue, New York 17, N. Y.

100,000 electrical items are distributed throughout the nation... Graybar

GRAYBAR ELECTRIC COMPANY, 420 LEXINGTON AVENUE, NEW YORK 17, N. Y. OFFICES AND WAREHOUSES IN OVER 130 PRINCIPAL CITIES

Current Publications

BOOKS

MOTIVE POWER OF THE UNION PACIFIC, by William Kratville and Harold E. Ranks. 326 pages, plan package, illustrations. Barnhart Press, Omaha. \$15.

This mammoth history of Union Pacific's locomotives comes close to being a history of American steam power. Every locomotive type that ever operated on the Union Pacific is covered in detail. Over 700 photographs show all the variations that made individual locomotives different from their class.

FUNDAMENTALS OF TRANSPORTATION, by William L. Grossman, 280 pages, index, Simmons-Boardman Publishing Corp., New York, \$5.50.

Intended as a basic transportation text for use either in connection with classwork or by an individual, this book concentrates on new material and material that is not easily available elsewhere. Thus there is relatively more space given to the supply and interchange of equipment, the relative merits of ownership and leasing, the role of freight forwarders, and the forces that cause a purchaser to choose one mode of transportation over another, and relatively less space to more familiar subjects such as the history of rate making.

EARLY HISTORY OF THE LONG ISLAND RAIL ROAD, 1834-1900, by Mildred H. Smith. 63 pages. Ira J. Friedman, 215 Main st., Port Washington, N.Y. \$3.

Story of the Long Island Rail Road from its beginning through years of struggle, financial stress and mergers, to the creation of a single system.

RAILS, MINES, AND PROGRESS: SEVEN AMERICAN PROMOTERS IN MEXICO, 1867-1911, by David M. Pletcher. 321 pages, maps. Cornell University Press, 124 Roberts Place, Ithaca, N.Y. \$5.50.

Describes the flow of American capital into Mexico as the result of promotion activities of seven men who led this economic movement during the last third of the nineteenth century.

UNIFORM RAILROAD GAUGE, by Eric Harding. 126 pages, illustrations, drawings, maps. Lothian Publishing Co., 1 Fleming Place, Melbourne C. 1, Australia, 30 shillings.

The story of how the break of gauge came about in Australia.

TRAFFIC MANAGEMENT, by Charles A, Taff. Revised edition, 631 pages, Richard D. Irwin, Inc., Homewood, Ill. \$8.70.

Provides the latest information on modern traffic management for any business or industry; full coverage given to all the services available by rail, motor, water, air and pipeline.

THE PHANTOM BRAKEMAN and other railroad stories, by Freeman Hubbard. 91 pages. TAB Books, Inc., 33 W. 42nd st., New York 36. 25 cents, plus 5 cent handling charge.

A paperback book containing a collection of fact-stories.

REA Board OK's 'Survival' Plan

► The Story at a Glance: A plan for a sweeping reorganization of the Railway Express Agency won the unanimous approval of the Agency's board of directors last week.

The plan, which is intended to keep the Agency in business under railroad ownership, would provide, among other things:

 Complete freedom of line-haul routing of express traffic.

 "Significant changes" in the method of payment to contract roads.

Details of the Railway Express Agency's "survival" plan (RA. June 8, p. 33) were disclosed July 2 after REA's directors gave it their approval. REA President William B. Johnson issued the following statement describing salient features of the plan:

"Principal features of the reorganization planned to enable the company's management to put express operations on a profitable, self-supporting basis are embodied in the proposed new Standard Express Operations Agreement between the Agency and all express-carrying railroads.

"The required unanimous approval of the new contract by the present 178 Standard Agreement lines has been recommended by unanimous vote of the board. The management of the Agency will meet shortly with the representatives of all contract roads to review the proposed agreement.

"If the railroads all accept the terms of the new agreement, it is contemplated that it would be submitted promptly to the Interstate Commerce Commission for required regulatory approval. The agreement would become effective the first of the month following ICC approval and would run through Dec. 31, 1973.

"It is premature to discuss details of the various terms of the proposed agreement, pending individual rail carrier consideration and action during the next several weeks. However, it can be revealed that the agreement contemplates certain major changes from present operations during the next two years, and further changes, effective July 1, 1961, with final transition to the eventual fully-reorganized operation beginning Jan. 1, 1963.

"Under the agreement, the Agency generally, with some qualification, would be given immediate complete freedom of line-haul routing of express traffic with the power to select such routes and modes of transportation most advantageous to more efficient and economical operations. Since there

would be no fixed or historical distribution of traffic among carriers for linehaul movement, it is expected that both service to shippers and the Agency's financial results would be improved materially.

"The agreement also would provide, in several steps, significant changes in the method of payment to contract railroads, important both to those carriers and to the Agency. The principal changes are worthy of discussion.

"Effective July 1, 1961, the payments to the contract railroads would be changed in that they would be based on an average rate in each regional group per car-foot mile of line-haul service rendered by each carrier. At the present, there are no such rates, the contract roads each receiving their prorata share of everything that is left in the respective regional group accounts after deduction of Agency expenses.

"Final step in the transition is the provision that, beginning Jan. 1, 1963, Railway Express, in effect, purchase its transportation from the rail lines on the basis of service rendered in terms of car-foot miles. The rates would be determined by a formula related to each group's average cost.

"Any excess funds remaining after payments to the carriers beginning July 1. 1961, would be divided equally between the Agency and the contract carriers. Thus, under the proposed terms, Railway Express Agency would have the opportunity for the first time of earning and retaining a profit for reinvestment in the further progress of the business."

"Among many other changes, the terms the proposed new agreement would provide are:

"A slight increase in the Agency's share of gross revenues on carload shipments.

"Instead of unanimous approval, agreement amendments would require the consent of roads handling an aggregate of 85% of express traffic.

"After the effective date of the new agreement, railroads could not withdraw until after June 30, 1961, and then could do so under revised settlement provisions on 12-months' notice or 8-months' notice if a previous 12-months' notice had been given for withdrawal on the same date by another agreement party.

"Since the scope of operations of many smaller roads is subject to continuing change, it is anticipated that the withdrawal provision would continue to be important where such carriers discontinue operations suitable to the handling of express.

"It is anticipated that under the new operation, the Agency would be put in a sounder financial and operating condition. Accordingly, there would be the important opportunity to extend and enhance for express shippers throughout the nation and the world the many fundamental advantages of the far-flung and complete-carrier services of Railway Express. Express shippers everywhere would be assured of having available—on a convenient, flexible and coordinated basis—the best of all underlying modes and routes of transport."

Escalator Liberalization Sought

The Brotherhood of Locomotive Firemen & Enginemen will press a five-point wage movement in negotiations with the nation's railroads this summer. Major items in the demands: a 14% wage increase; a cost-of-living escalator clause with wage adjustments every three months (RA, June 15, p. 7).

President H. E. Gilbert said the brotherhood will stress these demands:

- All cost-of-living increases in effect Nov. 1, 1959, shall be made a part of the existing basic rates of pay; arbitraries, miscellaneous rates, special allowances and daily, weekly and monthly guarantees shall be increased proportionately.
- Basic daily rates, arbitraries, miscellaneous rates, special allowances and daily, weekly and monthly guarantees shall be increased 14%.
 - · Resulting wage rates shall be

made subject to a cost-of-living adjustment computed every three months.

- Daily earnings minimum shall be
 \$26 for engineers in road service and
 \$23 for firemen in road service.
- Existing money differentials above standard rates of pay shall be maintained.

The present BLF&E agreement calls for cost-of-living adjustments every six months and an increase of 1 cent for each half-point increase in the September 1956 consumer price index. The new demand calls for a 1-cent adjustment for each 0.4 and 0.5 point change, alternately, by three-month periods. Cost-of-living adjustments over the past three years have built up increase totaling 13 cents an hour, which—under the BLF&E demands—would be considered part of the basic rate on which the 14% increase would apply.



Four-span railroad bridge over Dallas-Fort Worth Turnpike . . .

Great Southwest RR saved \$10,000 by choosing bridge girders of prestressed concrete

The twelve pretensioned, prestressed concrete bridge girders over the Dallas-Fort Worth Turnpike are the longest of this type ever used on a U.S. railroad. Great Southwest achieved low cost and ease of erection, got the bridge up fast across the busy turnpike. The twelve 67-foot beams and twelve 46-foot beams were all placed in two daylight working days without interrupting traffic!

The cost of all girders in place was only \$26,370. Part of the savings came from the inherent economy

of prestressed concrete construction. Even greater savings were possible because engineers modified highway girder forms on hand for railroad loading, saved the cost of special forms.

Great Southwest is one more modern railroad turning to concrete for construction economy, durability and more efficient operation.

Design by: Powell and Powell, Consulting Engineers, Dallas, Texas. Owners: Great Southwest Railroad, Inc., Dallas, Texas

PORTLAND CEMENT ASSOCIATION

A national organization to improve and extend the uses of concrete

Carloadings Drop 3.6% Below Previous Week's

Loadings of revenue freight in the week ended June 27 totaled 697,633 cars. the Association of American Railroads announced on July 2. This was a decrease of 26,105 cars, or 3.6%, compared with the previous week; an increase of 70,448 cars, or 11.2%, compared with the corresponding week last year; and a decrease of 35,100 cars, or 4,8%, compared with the equivalent 1957 week.

Loadings of revenue freight for the week ended June 20 totaled 723,738 cars: the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CAR LOADINGS

For the week			
District Eastern Allegheny Pocahantas Southern Northwestern Central Western Southwestern	1959 104,631 135,562 60,101 116,923 115,749 131,370 59,402	1958 93,358 110,560 53,977 108,754 90,926 119,664 50,771	1957 116,631 145,698 68,150 123,202 120,643 119,473 52,967
Total Western Districts	306,521	261,361	293 083
Total All Roads	723,738	628,010	746,764
Commodities Grain and grain- products Livestock Coal Coke Forest Products Ore Merchandise L.c.I. Miscellaneous	67,382 4,404 123,235 11,078 42,640 81,263 39,803 353,933	63,439 3,955 121,601 5,647 35,275 52,528 44,189 301,376	48.347 4.490 144.430 10.805 42.505 88.628 53.513 354.046
June 13 June 6 May 30 May 23	723,738 709,139 682,624 687,726 685,745	628.010 622.686 613.381 529.779 570,425	746,764 746,122 733,477 671,045 722,903

Cumulative total, 25 weeks 15,455,879 13,676,931 17,107,663

PIGGYBACK CARLOADINGS.-

U. S. piggyback loadings for the week ended June 20 totaled 9,140 cars, compared with 5,773 for the corresponding 1958 week. Loadings for 1959 up to June 20 totaled 190,799 cars, compared with 118,133 for the corresponding period of 1958.

IN CANADA.—Carloadings for the seven-day period ended June 14 totaled 82,703 cars, compared with 83,032 cars for the previous sevenday period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec d from Connections
June 14, 1959 June 14, 1958	82,703 83,745	28,509 27,455
June 14 1959 June 14 1958	1,630,504	654,772

New Equipment

FREIGHT-TRAIN CARS

➤ Thrall Car.—Will build 80 3,550 cu ft capacity covered hopper cars designed for carbon black loading. Cars are being purchased by Cabot Carbon Co., Columbian Carbon Co., Continental Carbon Co. and J. M. Huber Corp.

SPECIAL

- ► Frisco.—Purchased one crawler tractor from Caterpillar, for use in clearing derailments. The tractor is equipped with 20-ft sideboom, inside-mounted bulldozer blade and heavy-duty, rear-mounted winch. Lifting capacity of the sideboom is 68 tons.
- ► Repair Ratio 1.7% Higher Than Last Year.—Class I roads on May 1 owned 1,707,280 freight cars, 44,075 less than a year ago, according to AAR report summarized below. Repair ratio was 1.7% higher than on May 1, 1958.

	May 1, 1959	May 1, 1958	Change
Car ownership	1,707,280	1,751,355	44,075
Waiting repairs	141,020	115,942	+ 25,078
Repair Ratio	8 3 96	6.690	1 7 7 %

Maintenance Expenditures

▶ Up 8.6% in April.—Expenditures by Class I roads for maintenance of equipment, way and structures in April 1959 were up about \$20.7 million compared with the same month in 1958, according to report of ICC Bureau of Transport Economics and Statistics summarized below:

	April 1959	April 1958	% Change
Maintenance of Way & Structures	\$107,035,867	\$ 99,330,639	+78
Maintenance of Equipment	154,628,282	141,579,827	+9.2
Totals	241 444 149	240 010 464	0.6

Orders and Deliveries

➤ Orders Increase.—Orders were placed in May for 5,253 freight cars, compared with 3,736 in April. Freight cars ordered in May 1958 totaled 1,370. Deliveries in May totaled 3,358, compared with 3,741 in April and 3,534 in May 1958. The backlog of cars on order and undelivered as of June 1, 1959, was 36,869, compared with 35,479 on May 1, and 30,386 on June 1, 1958.

	Ordered	Delivered	Undelivered
Туре	May, 1959	May, 1959	June 1, 1959
B 01:			
Box Plain	1,251	793	13,259
Box Auto	0	0	500
Flat	325	258	1,638
Gondola	1,700	3.5	4.515
Hopper	1,500	1,512	13,408
Cov. Hopper	211	455	873
Refrigerator	35	173	1,685
Stock	0	0	0
Tank	221	118	758
Caboose	0	8	100
Other	10	6	133
TOTAL	5,253	3.358	36,869
Car Builders	3.465	2,263	15,748
Railroad Shops	1.788	1.095	21.121

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KAR-GO Bearings pay for themselves in 2 years!

Experience of 43 leading U. S. and Canadian railroads . . . and 30,000,000 miles of rugged service . . . show that Allison KAR-GO Cartridge Bearings pay for themselves in the first two years of use.

"Gadgetized" journal brass bearings cannot come close to matching the KAR-GO record. You can judge that for yourself when you discover that these bearings require less than one-half pint of lubricant per car per year.

You see, they're completely oil- and water-tight.

That was proved-conclusively-when a string of cement hopper cars was recently submerged above the bearing level for several hours after torrential rain. Oil samples taken from the KAR-GO bearing reservoirs immediately after showed no trace of water penetration.

Other KAR-GO advantages? There are scores of them – like the hydro-dynamic lubricating that eliminates journal sleeve and axle wear. There's a permanent wool felt lubricator instead of fre-



Two-thirds of the Diesel locomotive engines on American railroads are equipped with Allison connecting rod and crankshaft main bearings and piston-pin bushings.

quently replaced cotton waste or pads. And KAR-GO bearings end the need for "hot box" inspection at every stop. Some railroads have operated them for 130,000 miles without any attention.

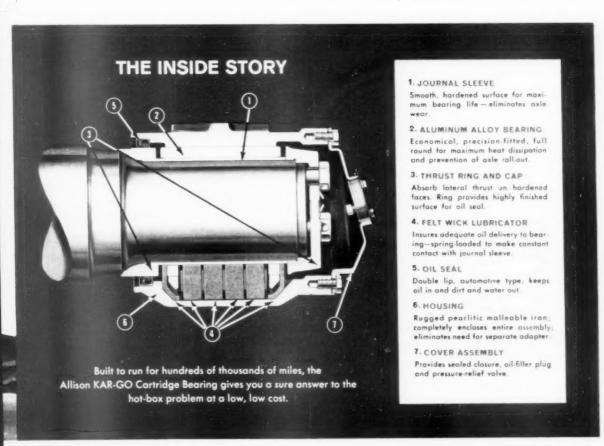
Can you afford, then, to pass up all the KAR-GO savings in your operation? Start cashing in on your next conversion or freight-car build!

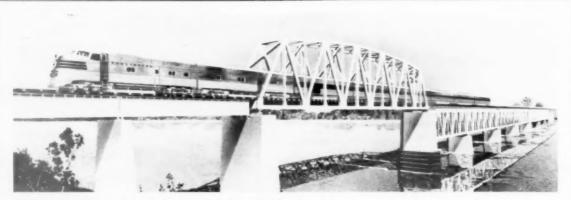
KAR-GO, ALLISON DIVISION OF GENERAL MOTORS Indianapolis 6, Indiana



JOURNAL BEARINGS

A product of and built only by the Allison Division of General Motors





CB&Q Building New Mississippi River Bridge

Burlington's new Mississippi River bridge-shown here in artist's conception-is due for completion by autumn of 1960. The main structure will be 2,501 ft long, will provide 63-ft clearance above normal river elevation with a 300-ft navigation channel. Two shorter spans, a 716-ft Quincy Bay bridge and a 296-ft State Aid Route No. 7 bridge, are also a part of the system. The overall job will involve a 412-mile line change at CB&Q's Quincy, Ill., river crossing. According to the railroad, the new structure replaces an existing bridge which was declared an obstruction to navigation. The project will require almost 4,500 tons of steel piling. 185 tons of reinforcing steel, 26,000 cu yd of concrete, 53,000 tons of sand and gravel and 40,000 bbl of cement.

8.5% Carloading Increase Predicted

Third quarter loadings of revenue freight will increase 8.5% this year over the same period of 1958. This is the educated guess of the 13 Regional Shippers Advisory Boards gathered from reports to AAR's Car Service Division.

Freight carloadings of the 32 principal commodity groups surveyed, according to the estimate, will be approximately 6.805,246 in the third quarter of 1959 compared with 6,272,-499 in the third quarter of last year

Twelve of the 13 Boards predicted an increase in the number of cars loaded with freight for the third quarter of 1959 compared with the same period last year, only the Atlantic States Board estimated a reduction (0.4%). Percentages of increase ranged from the 0.9% estimated by the Central Western Board to the 30.4% foreseen by the Circut Lakes Board.

In their estimates for the entire United States, the Boards expect an increase in the loadings of 24 and a decrease in eight of the commodities listed. Those showing an increase are:

Ore and concentrates, 32.3%; vehicle parts, 25.6%; citrus fruits, 14.4%; chemicals and explosives, 13.3%; lime and plaster, 12.9%; lumber and forest products, 11.8%; potatoes, 11.6%; iron and steel, 9.4%; cement, 8.3%; cotton, 8.2%; metals other than iron and steel. 7.9%; coal and coke, 7.6%; agricultural implements and vehicles other than automobiles, 5.9%; gravel, sand and stone, 5.6%; paper, paper board

and prepared roofing, 5.1%; frozen foods, fruits and vegetables, 4.5%; cotton seed, soybean-vegetable cake and meal, exc. oil, 4.5%; machinery and boilers. 3.8%; live stock. 3.1%; salt, 3%; petroleum and petroleum products, 1.4%; brick and clay products, 1.2%; flour, meal and other mill products, 0.7%, and fresh fruits other than citrus, 0.1%

Commodities for which decreases are estimated follow:

Hay, straw and alfalfa, 5.9%; all grain, 5%; automobiles and trucks, 3%; food products in cans and packages, 2.5%; sugar, syrup and molasses. 2.3%; fresh vegetables other than potatoes, 1.9%; poultry and dairy products, 0.2%; and fertilizers, all kinds,

Frisco Takes CG Case to Court

The Frisco has gone to court in a new bid to keep alive its hopes for control of the Central of Georgia.

A Federal District Court judge in St. Louis has issued a temporary restraining order enjoining the ICC from enforcing its orders of last Nov. 14 and June 9-the orders requiring Frisco to divest itself of CG stock interest or to transfer its CG stock to a corporate

Frisco charged that enforcement of the ICC decision would "immediately adversely and irreparably injure" the railroad on at least three counts:

· The railroad has "the choice of deciding between two alternative methods of immediate forced divestiture, either of which could well be highly injurious to it.'

· Frisco "will be subjected to unconscionable harrassment, inconvenience and expense, as well as unjust public degradation" if prosecution is undertaken under the penal provisions of the Interstate Commerce Act. The ICC order of Nov. 14. Frisco noted. said that the Commission would refer the matter of the railroad's alleged bad taith and violation of the law to the U. S. Attorney, with request that prosecution be undertaken.

· Because of the denial of Frisco's application, it "will be unable to put into effect the many benefits . . . which would accrue to [Frisco] as well as to the public, should its application be granted."

Frisco also charged that the Commission majority "erred as a matter of law and . . . acted arbitrarily and contrary to and without support in the evidence" in a number of its conclusions, among them:

• That Frisco would be unable to finance the acquisition of other publiely-held CG stock.

• That Trustee Fred B. Wilson is

"affiliated" with Frisco and that transter of CG stock to him has not operated to terminate Frisco control of CG. (Mr. Wilson was named trustee in 1956 after the Commission recommended that the CG stock be placed in the hands of an independent voting trustee pending disposition of the Frisco application.)

 That Frisco acted in bad faith and in violation of the law in acquiring CG stock and transferring it to Mr.

Wilson.

• "In concluding that the [Frisco] application should be denied as a punitive measure in spite of Division 4's express finding . . . that the public interest would be served by a grant thereof, and in spite of the Commission's long-established policy of approving applications involving similar circumstances."

RULES FIGHT

(Continued from page 9)

29 in 138 dailies, including 117 with a circulation exceeding 100,000.

Excerpts from the ad:

"Featherbedding . . . is confined to a minority of employees, many of whom were not born when these rules were made . . .

"For a generation railroad management has sought the cooperation of the rail operating unions to end these wasteful and costly practices—but without meaningful results. Four months ago, management suggested that the matter be submitted to an impartial commission for an objective study in the public interest.

"The operating unions not only refused to join in this step but warned that they would oppose any move by management to establish such a com-

mission.

"This callous disregard of the public's interest and this continued refusal to admit that there is anything wrong in charging the public \$500,000,000 for work not performed or not needed leave the railroads no alternative but to seek a solution by some other means.

"Accordingly, the management of America's railroad industry pledge that they will continue to strive, by whatever means are proper and hopeful of success, to obtain some correction in these inflation-producing, job-destroying, outmoded work rules, so that the country may have the modern and efficient railroad service to which the public is entitled."

Considering the AAR's firmness on the issue, it was considered likely last week that the railroads would unilaterally ask President Eisenhower to appoint a commission to study the question of

teatherhedding.

Letters from Readers

Regulatory Freedom

Denver

To the Editor:

The purpose of this letter is to express the hope that you will continue to bear down on the statement credited to you on page 19 of your May 25 issue [Europe Frees Rails: We Restrict Them] because the more thinking we can get along the line of greater regulatory freedom, the more I am inclined to believe that we will have a healthy railroad industry. These so-called fresh approaches are not the final answer but a free enterprise such as you have suggested might lead to the final answer.

R. K. Bradford Vice President—Traffic Denver & Rio Grande Western

Shorter Trains

Plymouth, Mich.

To the Editor:

In your issue of May 4 you hit the bull's eye twice in suggesting shorter trains manned by smaller crews.

It is common knowledge that the diesel permits hauling trains of from 140 cars up to 200 cars. When a diesel engineer finds that he wants to cut his speed from 55 to 25 or 30 mph there is 200 feet of slack that has to be absorbed. Some of the cars in the train may get greater impacts than they do in yard switching or even in bump testing.

There are many cases where impact recorders show one to five or six impacts so severe that they may not be recorded. In testing some of our equipment to reduce damage to freight we make bump tests to 10 and 11 mph before we feel that the design is adequate. This in spite of the fact that AAR regulations state that anything above 9 mph is excessive.

The subject is worthy of continued attention because I regret to say that I think this condition grows worse each year.

Ben Colman Vice President Evans Products Company

Labor's Side

Fort Madison, Iowa

To the Editor:

Your magazine has had several articles on railroad featherhedding, charging union-made jobs and two days pay in one. The carriers have had their say. Now how about printing the worker's side of the story.

I am a railroad fireman (a featherbedder). In my duties I save my railroad company much more in preventing major damages and delay than my wages ever come to—many times more. For instance, how in the world can an engineer see what is going on on the left side of his train or engine? How can he leave his controls to tour the 3 to 5 trailing units while in motion?

My presence for safety alone is a major factor. Also it is on-the-job-training as a future engineer. The railroad that I work for employs five men to haul 80 to 225 cars of freight—an engineer, a conductor, a fireman and two brakemen. Think of how many truck drivers it would take to haul this freight.

As for the pay of us so-called featherbedders, think of what kind of job I have and its worth. I am on call 24 hours a day. I may go to work 2 a.m. or 2 p.m. I never know. Also, we have no expense account for our room and board on the other end of the line. We are paid at the rate of miles. This was wanted by the railroads. Is not the fare rated so much per mile, the rate of freight so much per mile? And so are our wages so much per mile, as a truck driver is paid so much per mile. These rates were fixed to obtain the most efficient service by each man. This sounds reasonable, does it not? These are skilled workers that take many years of training.

The real featherhodding is done by management themselves. The number of employees has been reduced sharply, but the number of officials has not. Strange?

Are the rails going broke? Look at the stock market reports, dividends paid. Great investment? Yes, the labor unions will win this battle with the carriers for their own good and the good of the stockholders and for the good of the nation.

A. I. Dohman

tFor some Railway Age coverage of labor's side of the story, see our cover article of Nov. 3, 1958, p. 14—an interview with BLF&F President Gilbert; also p. 9 of this issue.—Ed.)

Per Diem Coverage

Chicago

To the Editor:

My sincere congratulations upon your excellent coverage of the hearings on per diem legislation. Your article in the "Age" of June 15 catches all the nuances of this complicated subject, gives every devil his due, and is a most admirable piece of reporting.

Eldon Martin Vice President and General Counsel Burlington Lines

You Ought To Know...

- Double bottoms, two trailer units pulled by a single tractor, have been approved by the New York State Thruway Authority for unlimited use. Tests conducted this spring (RA, Feb. 16, p. 52) have indicated to Thruway officials that the tandem rigs are a good bet for boosting revenue from motor carriers on the toll roads. The new regulations permit an overall length of 98 ft and a maximum gross weight of 127,400 lb, the highest maximums permitted anywhere in the United States.
- Additional express-rate increases have been authorized by the ICC in a report on reconsideration of its Oct. 13, 1958, decision. That decision authorized the Railway Express Agency to increase rates up to 15%, with exceptions. The present report eliminates some of the exceptions, permitting extension of the 15% increase to class rates on outbound shipments by retail stores of articles on which incentive rates are not maintained. and of articles on which incentive rates are maintained when shipments thereof from any origin tendered at one time weigh less than 300 lb.
- Reductions up to one-third in the cost of round-trip coach fares between all stations on the Norfolk & Western went into effect July 1. Cost of the new tickets will range between 21% and 33-1/3% less than formerly.
- Chesapeake & Ohio has slashed round-trip coach fares between principal points south from Detroit and east from Cincinnati and Louisville. The new fare structure is based on a round-trip rate one and one-third times the one-way fare. C&O says the plan provides savings of up to one-third, compared to regular round-trip fares.

- Louisville & Nashville will start construction Aug. I on a new passenger station and office building in Birmingham, Ala. Passenger and freight traffic personnel will be housed in station offices. Other L&N offices will be moved to a new building to be constructed near Boyles Yard. Completion of the new station is scheduled for early 1960 (RA, Jan. 19, p. 141).
- The ICC has ordered an investigation of an accident on the Seaboard Air Line near Meldrim, Ga., that resulted in the death of 20 persons. Explosion of two butane tank cars accounted for the heavy death toll among a group on an outing near a trestle.
- Minnesota's station agency law apparently will remain unchanged for the time being. Involved in a hassle over taxes, the state legislature was expected to adjourn last week without resolving differences in measures designed to raise from \$8,000 to \$15,000 or higher the revenue limit over which a station must have an agent.
- One hundred ballast cars were shipped, knocked down, from New York to Argentina last week aboard the Moore-McCormack liner "Mormacwave." The shipment was the vanguard of a 321-car order from ACF by Argentine State Railways (RA, Feb. 16, p. 55).
- Pullman-Standard Car Manufacturing Co. began operating as the Pullman-Standard division of Pullman Inc., effective July 1. Champ Carry, president of Pullman Inc., who announced merger of the wholly-owned subsidiary, said the division will carry on P-S business and activities without interruption.
- Old Colony's second demise in less than a year appeared to be permanent last week. The south-of-Boston branch of the New Haven ended passenger service at midnight Tuesday when Massachusetts lawmakers failed to extend the subsidy that had revived it last July (RA, July 14, 1958, p. 9). Some 10,000 commuters are affected.

- Chicago railroads are saluting foreign trade—and at the same time playing up the industry's role in serving the ports—in a special exhibit at Chicago's International Trade Fair. The fair, staged on Navy Pier, opened July 3, will run through July 18.
- Almost \$1.2 billion in unemployment benefits has been paid out in 20 years of operation under the Railroad Unemployment Insurance Act. Railroad Retirement Board figures show that the number of workers receiving benefit payments has varied from 5,000 in 1943-44 to 506,000 in 1949-50. Including sickness benefits (payable since 1947), more than \$1.6 billion has been paid to over 2,000,000 rail employees under the RUIA.
- Legislation permitting the formation of mass transit districts has been approved by the Illinois House and Senate. The bill provides that districts may be created by a two-thirds vote of officers of participating governments and approval at a referendum. Districts would have power to levy a property tax, would also be permitted to buy or lease transportation facilities.
- Missouri Pacific is trying a "dollar sale" in an effort to attract traffic to two secondary lines which have suffered sharp declines in passenger patronage. Round-trip tickets will be sold for one-way fare plus \$1 on trains operating Kansas City-Little Rock, Ark., and Kansas City-Newport, Ark. The plan goes into effect July 10, will be continued until Dec. 31.
- A new 180-mile railroad will be built through the Congo Republic in Africa to aid in transporting high-grade manganese ore from the interior of the Gabon Republic to the sea. The line will connect the existing Congo-Ocean Railroad with a 45-mile-long cableway leading from the mines.
- Canada's first coast-to-coast piggyback movement has been completed. It involved shipment (via CNR) of 14,000 pounds of furniture from Vancouver to Halifax— 3,800 miles.

CLASSIFIED ADVERTISEMENTS

Rates: \$10 per column inch (1" deep x 15 a" wide) Equipment used or resale accepted in this section

FOR SALE

REBUILT
RAILROAD CARS FOR INTERPLANT USE
GONDOLAS • BOX • FLAT
ERMAN-HOWELL DIVISION
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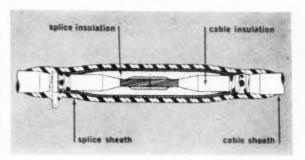
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The theory behind the design of "fail-proof" cable splices

Designing "fail-proof" splices ... or, putting it another way ... how to obtain splices that are as dependable as the cables they connect, is a subject that electrical engineers have studied for a long time.

The problem. The conductor of an electrical cable is insulated and sheathed with compounds designed specifically for the job, and they perform this job throughout the length of the cable. In splicing, however, portions of the insulation and sheath must be removed to enable the conductor ends to be joined together. Replacing these compounds with equally reliable materials is the basic problem in making a "fail-proof" splice.

An interesting observation. Many splicers replace the cable's insulation and sheath with tapes that have a hundred other purposes. A common opinion is "tape is tape—the cheapest is good enough." This opinion is one of the reasons behind the fact that most cable failures occur at the splice. Obviously, splices are not failproof if they're covered with materials that were not specifically formulated to insulate or sheath cables.

The solution. Fortunately, there are splicing tapes made of true cable compounds. These tapes are made by Okonite, the company that manufactures and designs superior electrical cables and the splicing tapes to go with them. Okonite tapes have been tested in the laboratory and proved in the field . . . and they are made by a cable manufacturer specifically to sheath and insulate cable.

Try Okonite Quality tapes. You'll be glad you did, and your splicers will, too. They'll appreciate the fact that Okonite tapes are easier to work with. Okonite and Okolite tapes for insulating, Okoweld and Okoprene for sheathing.

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[No union leader has yet written a letter like this — but we live in hopes. — Editor]

Dear Mr. Dan Loomis:

It may surprise you to know that I think the ad the railroads had in last week's newspapers was a pretty good opening statement on the working rules situation (even though I could give you an argument about parts of it). However, there are other aspects of the matter in which both employees and the public have a lot at stake, in common with managements.

Many of our members are more concerned about the loss of traffic by the railroads than they are about anything else connected with their jobs. We would like to see the railroads pursue a more active and comprehensive program to get this traffic back and we would like to help. But we have no right to bargain with management about how the business is run—so we ask, instead, for higher wages and "benefits" as substitute concessions. Palliatives, you might say.

Management alleges that railway working rules are a major cause of the railroads' inability to hold onto traffic. But just suppose railway working rules were relaxed—what then? Would managements use all or most of the savings thus made to reduce rates strategically on competitive traffic, so that the result would be, inevitably, an increase in railroad traffic and revenue?

As yet, I don't think you've given our members a strong enough argument to let loose of the bird we have in hand, when we are not told positively whether anybody is going out after the two in the bush or not.

Certainly we have no strong incentive to relinquish advantages we now have—as long as our members fear that the only result would be a temporary upsurge in railroad earnings. Such earnings would be quickly dissipated in further traffic losses, unless part of the savings were passed along to customers, in order to induce them to give us a larger share of their traffic. And when I say customers. I don't mean on all traffic, but in those places where rate changes would generate added business.

Our organizations have advised that they will not go along in calling for a Presidential commission to look into compensation of railroad employees, unless the whole railroad situation is to be examined too. I will admit privately (although not publicly) that the alternative we proposed is impracticable. Most aspects of the railroad situation—except working rules—have already been studied over and over again. What is needed in most of these other areas is not more studies, but more action.

There is a whole lot more to the railroads' competitive position than the high costs occasioned by present working rules. Modification of these rules, alone, wouldn't make the railroads as strongly competitive as they ought to be.

I believe both of us could agree that a big public fight between railroad managements and employees on the working rules question would be of little benefit to the industry or its organized employees. At the same time, when we are asked to go along with a working rules inquiry—where's our quid pro quo? We know our vulnerability. An inquiry into these rules, alone, would probably come up with recommendations that would be costly to our members. Would they derive any offsetting advantages? Maybe—but why not tell us specifically what and how?

You probably have seen where management and unions in the construction industry are advancing a joint program "toward maintaining and expanding the construction market . . . through the development of an ever more efficient product." Maybe there's an idea here for railroads.

Managements naturally do not want to surrender their proper prerogatives. But, without unions being in on setting policy, wouldn't it help if managements would tell us a little more about what their policies are—what they are doing and planning to do, to make the railroads more successful in competition? And, especially, tell us just how and why working rules changes are necessary to an effective business-getting program.

If I have invaded management's territory in suggesting a more vigorous sales campaign for working rules changes, please forgive me. Just put it down to the fact that I am just as full of zeal to get these rules modernized as managements are

Sincerely,

Joe Dokes, President
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